DOCUMENT RESUME

ED 025 595

VT 005 015

Trends in Prevocational Education for the Deaf. Training Manual. A Report of the Workshop for Improving Instruction for the Deaf. (Ball State Univ., Muncie, Ind. July - August 11, 1967).

Spons Agency- Office of Education (DHEW), Washington, D.C. Captioned Films for the Deaf Branch.

Pub Date 67

Note- 98p.

EDRS Price MF-$0.50 HC-$5.00

Descriptors- Bibliographies, Conference Reports, Course Descriptions, *Deaf Education, Educational Resources, *Educational Trends, Graphic Arts, Home Economics, Industrial Arts, *Instructional Improvement, Occupational Guidance, *Prevocational Education

Identifiers- *Workshop for Improving Instruction for The Deaf

The workshop participants who prepared this vocational report were working representatives of residential day schools for the deaf as well as integrated public school classes for deaf pupils. The age level toward which the materials were directed was determined at between 12 and 15 years of age, a period of transition for many deaf youth. The prevocational committee had two major tasks to perform during the 5-week workshop: (1) preview as many audiovisual materials as time permitted and annotate those selected as being of good quality, and (2) prepare broad curriculum guidelines implementing basic objectives of prevocational education that could be utilized by teachers in any of the above named types of classes for the deaf. The areas of prevocational activity included (1) home economics, (2) graphic arts, and (3) wood, metal, electricity, and industrial handicrafts. Related documents are VT 005 013 and VT 005 014. (CH)

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TRENDS IN PREVOCATIONAL EDUCATION FOR THE DEAF

Training manual. →

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VT005015

WORKSHOP FOR IMPROVING
INSTRUCTION OF THE DEAF
1967
BALL STATE UNIVERSITY
MUNCIE, INDIANA
DEPARTMENT OF HEALTH, EDUCATION
AND WELFARE
OFFICE OF EDUCATION
CAPTIONED FILMS FOR THE DEAF

TRAINING MANUAL

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

ED025595

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PREVOCATIONAL

A Report of the
WORKSHOP FOR IMPROVING INSTRUCTION FOR THE DEAF

BALL STATE UNIV~~ERSITY~~
Muncie, ~~Indiana~~

July 10—August 11, 1967

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FOREWORD

Like its predecessors the fifth annual Workshop for Improving Instruction of the Deaf was held at Ball State University, Muncie, Indiana, and was funded by the United States Office of Education.

Twenty qualified instructors of the deaf, two resource personnel and an interpreter participated under the direction of the project director, Dr. Donald G. Ferguson, Associate Professor of Education, Ball State University, Muncie, Indiana, and the project coordinator, Dr. Doin Hicks, Principal, Pilot School for the Deaf, Dallas, Texas, during a five-week period July 10—August 11, 1967.

Financed by the Captioned Films for the Deaf, branch of the United States Office of Education, the workshop had as its primary purpose the evaluation and annotation of existing media in the area of vocational education. In addition, study was made and brief reports were written in the areas of prevocational education, vocational guidance and trends in vocational education.

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BY WAY OF EXPLANATION

The members of the workshop who prepared this prevocational report are working representatives of residential and day schools for the deaf, and integrated public school classes for deaf pupils. The age level toward which we directed our collective efforts was determined at between 12 and 15, a period of transition for many of our deaf youth.

The prevocational committee had two major tasks to perform during this five-week workshop:

A. Preview as many audio-visual materials as time permitted, and annotate those selected as being of good quality.

B. Prepare broad curriculum guidelines implementing basic objectives of prevocational education that could be utilized by teachers in any of the above-named types of classes for the deaf. The areas of prevocational activity with which we were primarily concerned included:

1. *Home economics,* outlining activities related to food, clothing, child care, home decoration, home nursing, family living and consumer buying.
2. *Graphic arts,* including such sub-areas as copy preparation, composition, presswork, duplicating processes, photography, bookbinding.
3. *Wood, metal, electricity, and industrial handicrafts* within the general shop.

Following each of these major sections the reader will find a few suggestions for supportive media including: (1) selected audio-visual materials felt to be especially appropriate from among the many previewed and, (2) selected books, pamphlets, and manuals of value to teachers and pupils in the various areas covered. In addition, he or she will find at the end of the entire prevocational education presentation a selected bibliography which supplements that of each major area included. In addition, names and addresses from which materials in this report may be obtained are listed in the last section of this report.

The task of previewing visual materials had as its basic objective the selection and annotation of resources helpful to teachers of the deaf in the presentation and reinforcement of desirable instructional activities. In performing this task the committee previewed 111 16mm. films, 198 filmstrips, 5 sound filmstrips, and 79 2x2 slides. Of this total we recommended priority ratings (No. 5) for 25 films; 8 filmstrip "units," many of which included several separate strips; and 2 slide "units," including 24 slides. Annotations of these, and of some additional materials, appear in one section of this report.

INTRODUCTION

INTRODUCTION

The 1960's are witnessing continued technological expansion affecting all facets of our personal and communal lives. Dramatic changes in our industrialized economy are producing radical changes in employment opportunities for all youth—deaf youth most certainly among them. By mid 1975 our present age 12 to 15 year-old deaf boys and girls will be part of the under-age-25 group that will make up almost half of the expected increase in the total work force available at that time. It is further anticipated that during the decade ahead the rate of increase in women workers will be double that of men; and many of the former will, with proper training, be absorbed into semi-skilled positions. Among men, and to a limited extent women also, the foreseeable future looks promising in its increasing and continuing demand for skilled tradesmen. Work opportunities appear to be favorable in service and clerical-office occupations, *all* of which can use trained deaf youth.

Untrained youth—deaf or not—will find it increasingly more difficult to find employment opportunities in the years ahead. It has been estimated that of the total young workers attempting to enter the labor force during the "60's", almost one third will have failed to graduate from high school. Such youthful workers could well become the victims of industry shifts, automation, and the scramble among adult fringe workers for the ever-dwindling supply of semi-skilled or unskilled jobs. If this condition prevails for all untrained youth, contemplate the position of the deaf boy or girl who must face up to reality.

Reality is the realization that employment personnel are ever increasing their demands for training, for more finely-honed skills, for more subject matter preparation. Reality is the realization that such demands by those with their finger on industry's pulse is only a direct reflection of the changes in our economy. Reality is the realization by education in general and training schools for the deaf in particular that the pressure is on them —now and forevermore—to prepare their aurally handicapped youth for a productive and satisfying life in the world of work of this, the late Twentieth Century.

Instruction and training for this technological world of today and tomorrow is not limited to "manipulative" industrial occupations, to vocational school programs, or to one sex. Broadly speaking, all general education has some bearing on future employability of the individual, no matter to what economic station he aspires or climbs, or to which sex he belongs. We in deaf education are keenly aware of this; ability to express in language the concepts of the mind is an essential ingredient to occupational success and sound personal life adjustment. In brief, then, practically all school instruction has a bearing on the employability as well as the productivity of the individual.

Within this larger curricular framework is that narrower segment of the overall school program embracing such areas as industrial arts, home and consumer economics, business education, agriculture. No attempt is herein made to discuss the relative importance of this group, per se, in the general education setting, nor within the group itself the relative importance and contribution of each to the total school program. Each area of curriculum within the overall school program has as its underlying base the fundamental objective of attempting to prepare young people for a successful transition from their lives of dependency on parents and teachers to eventual acceptance of their expanding role as responsible citizens. Preparation for that transition begins a long time before it becomes a reality.

We in deaf education, while fully recognizing the role of the elementary grades in laying the foundation for such transition, prefer to confine our remarks in this vein largely to an age range roughly between 12 and 15, an age when deaf boys and girls are in a so-called "middle school" or "junior high school" environment. What the actual grade level will be is problematical. Because of the nature of their handicap, they are often not only older than their hearing classmates, but are less socially mature, and usually possess considerably less ability to read content for understanding. In reality, they are also members of a middle group—between elementary and high school—a group for which "prevocation" teachers must lay more bricks and mortar on the basic concepts, attitudes, and skills that are later perfected in the more vocational setting of the terminal high school years, and professional climate of post-high school technical education plants.

We are concerned, then, not with refined skills, but exposure and experimentation with the *tools* and *processes* and *materials* utilized by professionals who are learning or have learned such skills. We need to know, too, something of the origin of the basic raw materials they use, how raw materials are combined to produce other materials necessary to produce the tools which are essential to the production of the myriad goods demanded by an affluent society's ever-continuing search to upgrade its standard of living. We are concerned, also, with the distribution of end products produced, with their consumption and use in the home. We are involved with something of the "machinery" —paper, as well as metal—that sets the Industrial Giant in motion, that keeps it running. We are concerned with such areas of social endeavor because we feel that deaf youth in this age-range need more guidance and encouragement to search for clues to their own personal work stations in life. In short, we feel that "prevocational" education is, in reality, "exploratory" education, education that utilizes industry itself to acquaint the student better with industry's character and nature, its ingredients and methods, its techniques and skills.

This means that the student's regular school program should involve many exploratory experiences relating to the world of work, experiences that allow him to manipulate, with guidance, basic tools that change the form of a wide variety of materials—woods, metals, paper, glass, plastics. He needs exposure to general crafts, to rudimentary graphic arts, to drawing and planning—operations that are basic to organized creativity in all material areas mentioned. He should be allowed to observe natural and man-made processes that produce energy and motion, and changes in temperature and light. He should be given an opportunity to preview industrial, vocational, and technical work opportunities open to him in later years, and to sample the organizational structures of each. Through such "exploratory" exposure, the deaf student, it is hoped, will be aided in developing a realistic assessment of his or her own abilities and limitations. Such self evaluation and self understanding will greatly assist him or her to make satisfying occupational choices a few years hence.

Considering "prevocational" education, then, in the light of its "exploratory" nature, basic differences separating it from "vocational" education can be recognized, some of which are herewith set forth. Whereas the one serves an orientational and guidance function, aimed at developing problem-solving talent and basic skills related to materials and processes used in industry, the other—specialized vocational education—refines the established information/skill base into occupational proficiency that leads directly to saleable skills.

Again, whereas prevocational training is concerned with the care of, as well as use of, common tools employed in industry; with the development of understanding for and interest in industrial/commercial and home/consumer management areas; with observance of general safety precautions involving the use of all materials, tools and machines in their appropriate training settings; and with the development of desirable work attitudes, habits, and traits—specialized vocational education, utilizing the already-prepared base, goes beyond it with specific skill development with more highly sophisticated tools, materials, and end-products in view. Much more finely-drawn procedures are established, technical and related information are expected to be digested and utilized, the employee-employer relationship is much more closely and clearly established between the student trainee and his probable employer. Conversely, prevocational programs are not intended primarily to prepare its students for immediate and direct employment.

Another major difference between the two curriculum areas is that relating to the type of project usually developed. Whereas prevocational programs, from school to school, usually offer training in similar broadly based materials centers, vocational education programs are more closely attuned to the specific occupational needs of the separate communities, with detailed instruction based on an analysis of what the individual workers need to know and be able to do.

This calls for modern production equipment of sizes and types similar to those used in industry, in shops laid out for production work—a far cry from the general shop typical of the prevocational school program on the middle or junior high level with its predominance of hand tools and basic machines of a small and relatively inexpensive type.

In summation, an "exploratory" program is needed to give our acoustically-handicapped boys and girls a better understanding of their own interests and abilities at an appropriate time in their developing lives. It is also necessary in picturing for them, in a realistic manner, the processes, materials, and requirements of the industrial/commercial/home making world that is theirs to inherit. It provides an in-school experience leading to post-school vocational choice and preparation. It is, in essence, vocational guidance in a practical form.

In a most limited way, then, we hope to have established a reason for having a prevocational program. We are convinced that the deaf boy and girl need vocationally-oriented exploratory opportunities on this age level. We think that both prevocational and vocational programs need each other—that our deaf youth need both. The one is a curricular facet of general education; the other a more highly developed segment of specialized education. As pointed out in the Harvard Committee report, *General Education in a Free Society,* "The direct contact with materials, the manipulation of simple tools, the capacity to create by hand from a concept of the mind—all are indispensable aspects of the general education of everyone."

In the sections that follow, broad guidelines are set forth for implementing what we feel to be the basic objectives of prevocational education, down through the several materials and subject areas that are most commonly employed in industrial cross sections of American communities.

It must be explicitly made clear that rigid time limitations precluded perusal of a report in depth, even in the areas covered. No opportunity presented itself for treatment of general business education or agriculture—both possible subject areas in a prevocational curriculum. However, the interested reader is referred to other committee reports in this publication that treat at least some of these broad subject areas, but from a point of view somewhat more specific than that taken by prevocational, "exploratory" programs for the deaf. It should further be mentioned that educational media aides recommended for the various subject areas are in no way complete, but do represent what we feel to be especially appropriate from the many sources which the committee did find an opportunity to preview.

HOME ECONOMICS

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HOME ECONOMICS

Introduction

The purpose of homemaking education is to help students to develop attitudes, knowledge and judgment, along with some skills that will help them make the optimum contribution to their own home life. Young people need to build better person-to-person relationships, not only with boys and girls of their own age, but also with members of their own families and with other people in the community. Since these experiences which strengthen an individual's participation in family life also strengthen his or her ability to function as a citizen, effective teaching in home economics has double merit.

Every deaf student should have homemaking education to enhance his possibilities to live a more useful and satisfactory personal, family, and community life. Boys as well as girls should be included in the program since many women today are working outside the home and both parents need to share in homemaking responsibilities. Through class activities, boys and girls learn to accept and practice homemaking responsibilities by working together in groups.

Suggested Areas

Students can best learn to be contributing members of their families by learning to accept their responsibilities in the course of their daily living. Therefore, suggested experiences and activities are possible in the following areas: foods, clothing, child care, home decoration, home nursing, family living, and consumer buying.

General Objectives

Experience and activities in homemaking education should help students to make progress in:

1. living in the family with mutual understanding and happiness;
2. finding and developing vocational interests and opportunities;
3. adapting individual and family practices to changing world conditions;
4. developing as a person and as a functioning member of society.

FOODS

Purpose

The purpose of instruction in foods is to provide students an opportunity to learn how to plan, prepare, and serve nutritious meals. It is concerned with three related problems:

A. planning meals to meet the nutritional needs of the body;
B. buying food wisely, considering its costs and its nutritional values;
C. caring for food after it is bought to preserve its nutritional value and to prevent waste.

Desired Outcomes

To develop interest, knowledge, ability, and appreciation in:

A. reading and successfully following recipes;
B. marketing wisely, preparing and serving nutritious meals;
C. observing rules of kitchen safety, cleanliness, and efficiency.

Content

A. organization and use of kitchen tools
B. safety in the kitchen
C. meal planning
D. nutrition
E. marketing
F. proper selection and care of food in the home
G. preparation of food for the
    1. family
    2. children
    3. aged
    4. sick and convalescent

Activities

A. become oriented to the kitchen equipment.
B. make some preserves, jellies, pickles, or relishes.
C. discuss the use and cost of frozen and pre-packaged foods and meals.
D. visit grocery stores to get acquainted with foods and marketing.
E. plan menus.
F. study food costs.
G. make a list of foods needed by the average person every day.
H. practice in assisting with the preparation and serving of breakfast, luncheon, and dinner for from four to six people.
I. learn the importance of the basic food group.
J. plan, prepare, and serve a luncheon for invited faculty members.
K. study charts showing various cuts of meat.
L. draw diagram of correct table setting for breakfast, luncheon, and dinner menus.
M. discuss the advantages of knowing socially acceptable manners.
N. display illustrative material of foods for elderly people and invalids.

Materials and Tools

- measuring equipment
- mixing and preparation equipment
- cutting and chopping equipment
- baking pans and oven dishes
- equipment for cooking on top of the range
- small equipment and appliances
- pot holders
- table linen
- dish towels and cloths
- chinaware
- silverware
- glassware
- canning and freezing equipment
- sinks and sanitation equipment

Supportive Media

Films	**Company**
Kitchen Safety	National Ed. Media Inc.
The Wonderful World of Beef	Douglas Films
The Making of Fine China	Lenox
A Public Well-Served	Paper Cup & Container Industry
14 Acres of Kitchen	Wilding
Give Your Eggs A Break	National Ed. Media Inc.
The Fine Art of Sterling	Reed and Barton
America The Bountiful	Jim Handy Organization
Soups, Sauces, Entrees	General Foods
Frozen Foods	Bailey
Eat Well and Grow Well	Coronet
Foods From Grain	Coronet
Fundamentals of Diet	Encyclopedia Britannica
My Name is Rice	Jack Leib Prod. for Rice Council
Mr. Busboy	National Ed. Media Inc.
Bring Home the Bacon	Oscar Mayer Co.
Mexican Foods the American Way	Jamor
Filmstrips	
The Pork We Eat	American Meat Inst.
Meal Time Can Be Magic	General Mills
Cookery Instantized	General Mills
Identification of Kinds of Meats	Colonial Films
Identification of Cuts of Lamb	Colonial Films
Identification of Cuts of Pork	Colonial Films
Identification of Cuts of Veal	Colonial Films
The World of Wonderful Foods	Procter & Gamble
Creative Meal Planning	R. T. French
The Food Preparation Center	McGraw Hill
Better Biscuits	General Mills
Beautiful Cakes	General Mills
Fun With Frosting	General Mills
Breads You Bake With Yeast	General Mills
Cooky Wise	General Mills
Come to a Party, R.S.V.P.	Pineapple Growers

Muffin Making	General Mills
Batter Breads	General Mills
Easy As Pie	General Mills
Song of the Salad	H. J. Heinz Co.
Party Plans for Pies	Swift and Co.
Convenience Cookery With Portable Electric Appliances	Evaporated Milk Assoc.
Teen Time Cooking With Carnation	Carnation Company
Pasta and Italian Sauce	Lawry's Foods, Inc.
Meal Planning With Soup	Campbell Soup Co.
Breakfast for B.J.	Pillsbury
Guide to Vegetables	Kraft
Guide to Cheese Making	Kraft
Guide to Meats	Kraft
How's Your "Sense of Taste"?	H. J. Heinz Co.
The Sterling Silver Way	Sterling Silversmith of America

FOODS

Books

_____. *Better Homes and Gardens New Cookbook*. Meredith Publishing Co. Des Moines, Iowa. 1961.

_____. *Better Homes and Gardens Casserole Cookbook*. Meredith Publishing Co. Des Moines, Iowa. 1961.

_____. *Better Homes and Gardens Dessert Cookbook*. Meredith Publishing Co. Des Moines, Iowa. 1961.

_____.*Better Homes and Gardens Meat Cookbook*. Meredith Publishing Co. Des Moines, Iowa. 1961.

_____. *Better Homes and Gardens Salad Cookbook*. Meredith Publishing Co. Des Moines, Iowa. 1961.

_____.*Betty Crocker's New Picture Cookbook*. McGraw Hill Book Co. New York. 1961.

Carson, Byrta. *How You Plan and Prepare Meals*. McGraw Hill Book Co. New York. 1962.

Cronan, Marion L. and Atwood, June C. *Foods in Homemaking*. Charles A. Bennett Co. Peoria, Illinois. 1965.

_____. *Frozen Foods Cookbook*. General Foods Kitchens. Random House. New York.

Goldman, Mary E. *Planning and Serving Your Meals*. McGraw Hill Book Co. 1959.

_____. *Good Housekeeping Cookbook*. Good Housekeeping Book Division. New York. 1958.

McLean, Beth B. *Meal Planning and Table Service*. Charles A. Bennett Co. Peoria, Illinois. 1960.

Morton, Alice D. *Teach Me to Cook*. Hart Publishing Co. New York. 1960.

_____. *Pillsbury Family Cookbook*. The Pillsbury Co. Minneapolis. 1960.

Pollard, L. Belle. *Experience With Foods*. Ginn and Company. Boston. 1956.

FOODS

Pamphlets

A variety of educational material is available from the National Dairy Council, 111 N. Canal Street, Chicago, Illinois.

_____. *Breads You Bake With Yeast*. Betty Crocker. Minneapolis.

Gifford, Marie—Director, Consumer Service Dept. *Armour Fresh Meat Study Guide*. Armour and Co. Chicago, Illinois.

Gifford, Marie—Director, Consumer Service Dept. *Armour Processed Meats Study Guide*. Armour and Co. Chicago, Illinois.

_____. *How to Master the Art of Pastry Making*. Betty Crocker. Minneapolis.

_____. *Kerr Home Canning Book and How to Freeze Foods*. Kerr Glass Mfg. Corp. Sand Springs, Oklahoma.

_____. *Meal Planning and Guide*. Pet Milk Co.

_____. *Perfect Cakes and Cookies Every Time*. Pet Milk Co.

_____. *Proper Frying*. Proctor and Gamble. Ivorydale, Ohio.

_____. *Stir and Roll Pastry Manual and Chart*. Wesson Oil.

_____. *10 Short Lessons in Canning and Freezing*. Kerr Glass Mfg. Corp. Sand Springs, Oklahoma.

CLOTHING

Purpose

The purpose of clothing instruction is to help the students to understand how to care for sewing equipment efficiently and properly, to select fabrics and patterns, and to make garments. A major emphasis includes the construction of one or more garments with attention to standards of workmanship, speed, and skill in sewing.

Desired Outcomes

A. To develop the ability to identify, use and care for sewing machines and tools properly;

B. To develop knowledge of various fabrics and their appropriate use;

C. To develop the ability to select and use patterns;

D. To maximize transfer of learning to both home and industry.

Content

A. Identification of clothing needs of the school girl and other members of the family

B. Selection of materials, patterns, and finishes for garments to be made

C. Use of patterns (understanding and following direction sheet)

D. Alteration and adjustment of patterns
E. Cutting materials according to pattern
F. Fitting garment
G. Construction and finishing process
H. Evaluation of finished work
I. Comparison of workmanship, quality, and cost with similar ready-made garments
J. Proper care of clothing
K. Alteration and repair of clothing
L. Choice of accessories and construction (time permitting)

Activities

A. Compile a general list, illustrated with pictures, of a basic wardrobe which is appropriate for an average school girl's activities.
B. Practice taking measurements which determine pattern size.
C. Study current designs in pattern books for suitability of individual.
D. Compare samples of textile materials as to width, quality, texture, and cost.
E. Learn to read pattern chart.
F. Practice threading sewing machine; learn its operation and use, as well as its safety.
G. Exhibit completed garments in display cases or fashion shows.
H. Formulate reasonable standards of workmanship.
I. Make costumes for school programs.

Materials and Tools

needles and pins
thimbles
scissors
mirrors
hem line markers
rulers
gauge
pinking shears
charts
iron (steam & dry)
tape measure
cutting tables
sewing machine
tracing paper and tracers
ironing board

Supportive Media

Filmstrips

Teen Fashions—67	Sears
Sewing Series	McGraw Hill Book Co.
Begin With the Pattern	McCall Patterns
Start to Sew	McCall Patterns
To Beauty or Not to Beauty	Coty
Fiber Care	Visual Ed. Consultant
Up and Down of Fabric	Visual Ed. Consultant

Books

Bishop and Statler. *Basic Construction.* J. B. Lippincott. Philadelphia. 1962.

Chambers, Moulton. *Clothing Selection*. J. B. Lippincott. Philadelphia. 1961.

Lewis, Dora, Bowers, Mabel Good, and Nettunen, Marietta. *Clothing Construction and Wardrobe Planning*. The Macmillan Co. New York. 1960.

_____. *McCall's Sewing Book*. Random House. New York. 1963.

Oerke, Bess. *Dress*. Charles A. Bennett. Peoria, Illinois. 1960.

Picken, Mary Brocks. *Singer Sewing Book*. Grosset & Dunlap. New York. 1954.

Pollard, Belle. *Experience With Clothing*. Ginn and Co. New York. 1961.

Pamphlets

Wool Primer	Botany Mills, Inc. Passaic, New Jersey
Basically Yours	McCall's Corp. Dayton, Ohio
Line Chart	McCall's Corp. Dayton, Ohio
Pick the Perfect Pattern	McCall's Corp. Dayton, Ohio
Size Right Shells	McCall's Corp. Dayton, Ohio
Tips for the Sew Set	McCall's Corp. Dayton, Ohio
Cotton From Field to Fabric	National Cotton Council
Cotton Panorama	National Cotton Council
How to Stage Your Fashion Show of Cottons	National Cotton Council
Why Cottons	National Cotton Council
Why You Can Count on Cotton	National Cotton Council
Wonderful World of Cotton	National Cotton Council
Posture Teaching Aids For Girls	National Dairy Council
Zipper Reference File	Talon Educational Service

CHILD CARE

Purpose

The primary aim of instruction in this area is to develop understanding among the students of what constitutes good physical, mental, social and emotional growth of children.

Desired Outcomes

To develop:

A. an understanding of how to care for and enjoy children
B. an understanding of the food needed for children to meet their special growth and health characteristics
C. ability to select play materials and stories suitable for children of various ages
D. understanding and appreciation of the need all children have for affection and a sense of belonging

Content

A. physical, mental, emotional, and social growth characteristics of children

B. care of children—a mutual responsibility of all members of the family
C. food and clothes for children
D. character and habit formation
E. toys, play and games for children
F. community organizations concerned with children's welfare

Activities

A. Discuss the characteristics of a home which provides a good environment for child development.
B. Compile lists of stories, books, and television programs suitable for small children, with reasons for each selection.
C. Make a list of desirable physical, mental, emotional, and social development which can be acquired through well-selected activities.
D. Discuss how sharing experiences with children can enrich their lives.
E. List methods of discipline and ways of meeting difficulties with children.
F. Name ways in which children can make friends or share interests.
G. Report on desirable eating habits of children, indicating the kinds and amounts of food needed for different ages.
H. Prepare a party for pre-school children.
I. List and discuss local agencies which advise and help with child care.

Materials

A. magazines and newspapers illustrating baby clothing
B. toys, games and books appropriate for children of various ages
C. feeding equipment and supplies
D. bathing equipment, including a layette and scales
E. scissors and medical supplies

Supportive Media

Films	
Baths and Babies	Johnson and Johnson
Filmstrips	
There Tots and Teens	McGraw Hill Book Co.
Off to a Good Start	Heinz Baby Food

Books

———. *Baby Sitter's Guide*. Henry Holt Co. 1954.
———. *Better Homes and Gardens Baby Book*. Meredith Publishing Co. Des Moines, Iowa. 1957.
Brisbane, Holly E. and Riker, Audrey Palm. *The Developing Child*. Charles A. Bennett Co., Inc. Peoria, Illinois. 1965.

Pamphlets

Baby Sitting	Gerber Products Co.

Baby Sitter's Handbook	G. P. Putnam Sons, N. Y.
Children Need Toys	American Toy Institute, N. Y.
How to Choose Toys	American Toy Institute, N. Y.
Make Room For Toys	American Toy Institute, N. Y.
Sitting Safety	Gerber Products Co.
Toys for All Children	American Toy Institute, N. Y.

HOME DECORATION

Purpose

The primary aim of instruction in home decoration is the development by students of the ability to select wall, ceiling, floor, window treatments, and furnishings of a house with consideration being given to costs, art principles, needs, activities and personalities of the people living in the house.

Desired Outcomes

To develop:

A. ability to apply the principles of art both to home decoration and to the selection of home furnishings
B. knowledge of design and color
C. ability to select home furnishings that are convenient and practical as well as beautiful

Content

A. selection and proper care of furnishings
B. comparison of workmanship, quality and cost
C. arranging furnishings for convenience and comfort
D. choice of accessories
E. using furnishings of different periods

Activities

A. Use bulletin boards, exhibit cases, shelves, and tables to arrange and display furnishings and home accessories.
B. Read about and discuss the selection and arrangement of furnishings for various rooms in the home.
C. Discuss color schemes for rooms of various exposures.
D. Take field trips to model homes, museums, and stores.

Supportive Media

Films

Color and Pigment In Art	Coronet

Filmstrips

Come Catch a Rainbow	Pittsburgh Glass Plate Co.
Fiber to Fabric	Pittsburgh Glass Plate Co.
Decorating Made Easy	Sears
Fashions in Dining	Sears
Road to Responsibility	Proctor & Gamble

Books

Austin, Ruth E., Parvis, Jeannette O., and Spafford, Ivol.

Furnishing Your Home. Houghton Mifflin Co. Atlanta, Georgia. 1961.

______. *Better Homes & Gardens Home Decorating Book*. Meredith Publishing Co. Des Moines, Iowa. 1957

Morton, Ruth. *The Home and Its Furnishings*. McGraw Hill Book Co. New York. 1953.

Pamphlets

Carpets and Rugs	Carpet Institute, Inc.
Color Planning For Home Interior	Cooperative Extension Service
Decorating Made Easy	Sears
Let's Talk About Furniture Styling	Kroehler Mfg. Co.
Let's Talk About Upholstery	Kroehler Mfg. Co.
Let's Talk About Furniture Quality and Construction	Kroehler Mfg. Co.
Pattern 13 Collection	Founders Furniture Co.

HOME NURSING

Purpose

The purpose of instruction in home nursing is to develop some understanding among students of how to plan, prepare and serve nutritious meals with special attention to the sick and convalescent. Also, a purpose of this area is to sensitize students to needs of the home patient in general.

Desired Outcomes

A. the ability to recognize good health and symptoms of ill health
B. understanding of the responsibilities of caring for and feeding the sick
C. desirable attitudes toward the sick
D. the ability to plan and serve special diets for patients

Content

A. care of the sick for comfort, convenience and sanitation
B. food for the sick
C. clothing and bedding for the sick
D. home safety

Activities

A. Arrange a bulletin board "food for the patients".
B. Plan menus for various diets such as: liquid, bland, salt free, etc.
C. Discuss the values of attractive and tasty meals.
D. Demonstrate methods of sterilizing dishes and utensils.
E. Prepare and serve sample diets.

F. Review and discuss good nutrition and the Basic Four requirements
G. Take a field trip to observe a hospital department of food service in operation.

FAMILY LIVING

Purpose

The primary aim of instruction in family living is to develop a better understanding by the student of the family as a primary social unit.

Desired Outcomes

A. to develop appreciation of each member's contribution to successful family living
B. to develop the ability to better understand one's self and others
C. to develop an understanding of maturity
D. to develop the ability to adjust to problems in family living

Content

A. characteristics of a successful family
B. appraisal of one's own family
C. individual roles in the family (father, mother, child, etc.)
D. family traditions, customs, and standards of behavior

Activities

A. Discuss the average family pattern in your neighborhood, size of family, general economic status, nationalities, general interests and activities.
B. Discuss the effect of family relationships on personality.
C. Arrange panel discussions on the effects of the following upon the individual's outlook:
  1. position in the family
  2. family patterns
  3. family discipline
  4. family affection

Supportive Media

Films

Everyday Courtesy, 2nd, ed.	Coronet
Fathers Go Away to Work	Bailey Films
How to Keep a Job	Coronet
You and Your Work	Coronet

Books

Adam, Clifford. *Preparing For Marriage*. E. P. Dulton and Co. New York. 1951.

Bailard, Virginia and Strong, Ruth. *Ways to Improve Your Personality*. McGraw Hill Book Co. Chicago. 1961.

Beery, Mary. *Young Teens Talk It Over*. McGraw Hill Book Co. New York. 1955.

Neugarten, Bernice L. *Being Teen-Agers*. National Forum, Inc. Chicago. 1950.

Pamphlets

The Art of Dating	Association Press, N. Y.
Finding Yourself	National Educational Association
Other Lands and Other People	National Educational Association
Good Neighbors	Public Affairs Committee

CONSUMER BUYING

Purpose

The purpose of instruction in consumer buying is to develop some understanding among students of how to satisfy needs and desires through wise use of available resources including income, time, energy, available consumer goods and material things.

Desired Outcomes

To develop:

A. an appreciation for the necessity to balance family expenditures with family income

B. better judgment in evaluating the money needs of each member of the family

C. knowledge of important consumer guides in buying

Content

A. types and quality of markets in the community

B. progress in the commercial handling of food

C. variation in grades and quality of similar foods

D. federal, state, and municipal laws protecting the consumer

E. evaluation of food advertisements

Activities

A. List the various kinds of stores in the neighborhood.

B. Compare prices and range of goods in different stores and shopping centers.

C. Make out shopping lists for sample menus.

D. Make a report on personal observations of good and bad shopping practices.

Materials

A. commercially canned and packaged goods of different sizes

B. illustrations, posters, advertisements, etc.

C. varied consumer reports

Supportive Media

Filmstrips

Funds and Fundamentals	McGraw Hill Book Co.

Your World and Money	**Money Management Institute**
Your Money and You	**Household Finance Corp.**
You, The Shopper	**Money Management Institute**

PREVOCATIONAL GRAPHICS

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GRAPHICS

Introduction

The term "graphic arts" is widely used throughout industry, business, and education today. But in "yesterday's" thinking, "graphic arts" might well have meant only industrial arts "printing" courses, built around nothing more than hand composition of type and a smattering of presswork.

Within the framework of today's wide-spread mass communication needs, the term "printing" is too restrictive, whereas "graphic arts," as a broader term, is meant to include all activities closely allied to the printing and publishing field. As one of the ten leading industries in the United States, graphic arts ranks high in number of employees, value of product, number of establishments, and the use of its product in daily life.

That the industry plays a significant role in the economic life of the deaf community is well known. That graphic arts should be an integral part of a comprehensive industrial arts shop in an education setting for secondary deaf youth is generally recognized. That it is entirely feasible within the limits of prevocational age, interest, and reading levels has been established, also.

In such a school environment it could well be set up as a one-unit general shop, subdivided into several areas of learning activity, depending upon teacher ability, knowledge and skills; upon structured time available to pupils; and upon available equipment and supplies. Ideally, the prevocational student should have ample opportunity to work with a variety of equipment used in the duplication of graphic materials—not just letterpress printing, but including such other processes as offset, and such stencil printing equipment as office duplicators of various types, blue print units, and silk screen printing. Thus, a graphic arts section of the prevocational general shop may include many processes, methods, skill operations, and materials—in a number of activity sub-areas.

Aims and Objectives

Over-riding a graphic arts program at either vocational or prevocational level are general objectives basic to industrial arts, per se. In addition, there are aims and objectives more specifically applicable to graphic arts in particular, on either a secondary or intermediate level—the latter being the "exploratory" level of prevocational education serving the interests and needs of the age 12 to 15 year-old deaf youth. Such broad objectives, structured to "fit" this group, could include:

1. Reviewing the more important historical graphic arts developments that have contributed significantly to civilization.

2. Understanding the contribution of the graphic arts to modern business, industry, education, and the professions.
3. Knowing some basic facts concerning the many occupations available in the graphic arts field.
4. Providing a background of knowledge and minor skills leading to the intelligent selection of an avocational interest.
5. Knowledge of the sources of paper-making materials, and of sources of materials used in printing.
6. Appreciation of basic factors affecting the costs of various types and methods of duplicating communication materials.
7. Recognizing and appreciating examples of basically good typographical design and of a well-printed product.
8. Learning the technical terminology associated with the graphic arts industry.
9. Planning a job of printing intelligently.
10. Knowing the various processes used in the graphic arts field and their application through particular methods, tools, and materials.

In the teacher's application of these general aims and objectives would be opportune references desirable to work attitudes, and to sound habits of personal hygiene and safety in the shop. Such instruction would not be treated as separate lessons, but as part of any graphic arts lesson, stressed when needed. Recommended also, of course, would be appropriate reference to and utilization of the shop library, captioned films, filmstrips, slides, transparencies, flat pictures, and field trips to supplement each important aspect of graphic arts as taken up by the prevocational shop teacher.

Fulfilling "to the letter" objective No. 10 (above) as an operational reality consumes years in the process and goes far beyond the intent and scope of prevocational "exploratory" education. But a deaf boy's exploratory approach to such professional sophistication is made more secure if anchored to the related academic areas of English, mathematics, and science. Further, since the duplication of graphic materials requires a variety of talents and skills other than printing skills, alone, a number of supportive subjects are desirable. Among this group, those skills other than printing that have specific application to the graphic arts industry would have to include: (1) art (2) drafting (3) communication skills as taught in business education (4) photography (5) journalism, with training in proofreading. Related areas together, academic and supportive, provide the prevocational student with an educational background most helpful in assuring him adequate preparation, reasonable progress, and eventual sufficiency in the graphic arts profession. A few general statements are appropriate with regard to each of these supportive elective areas, keeping in mind their prevocational level application.

Art

Lays a broad foundation for jobs in graphic reproduction in such areas as lettering, design, page layout, illustrating. These are all skills required in making "paste-up" or composite copy to be photographed for plate making.

Drafting

Is considered as a good basic training for reproducing drawings with the blue print, diazo, and other, more modern machines. The microfilming and mounting of drawings is more readily done by those with knowledge of drafting.

Business Education

Such skills as general typing, specialty typing of copy on spacing typewriters, and filing and business systems are foremost in the demands for skilled personnel. On a much lower level of skill attainment the prevocational student can profit by early training in this area.

Photography

Is an ever-expanding area in graphic arts, with innovations that are constantly providing new applications in all forms of duplication. On the prevocational level, the instruction would need to be kept to simple basics.

Journalism

Provides related practices of proofreading and page layout that are especially helpful to the young deaf student's future progress in graphic arts.

Suggested Activities

As suggested in the introduction, a prevocational-level general shop in graphic arts should include not only "printing" but also certain other processes, methods, and operations that are directly associated with printing. In addition to a basic classroom "related-learnings" area, and such basic "work stations" as (1) hand composition and (2) relief printing (letterpress) and assuming that the equipment and teaching personnel can be made available, other desirable sub-areas would be (3) layout and design (4) common auxiliary equipment such as slug, paper, and stock cutters; mitering, scoring and perforating equipment (5) a bindery station (6) a silk screen station (7) a block printing station (8) a photography work area (9) planographic (offset) printing equipment and (10) stencil printing work station (office duplicating equipment). If space permitted, the school newspaper staff could well be located within the general graphic arts complex, equipped with its own tools and supplies.

All of the aforementioned broad objectives for graphic arts are, in part, attained through teacher-pupil-demonstration-seat work instruction, and include such typical content areas as listed under the following sub-headings. These few are only suggestive of broad areas of activity. The reader is referred to the many excellent sources available for more detailed treatment, including suggestions for project development supportive of the basic broad objectives. For each broad objective he will determine his own range of specific goals, applicable to his own school and teaching station, keeping always in mind that all such specific objectives need to be kept exploratory in nature, and that the learner at this level is not expected to develop a high degree of skill through repetition or mass-production techniques. Following, then, are suggested broad learning areas supportive of each of the aforementioned graphic arts objectives:

1. Historical graphic arts developments of significance
    a. Egyptian hieroglyphics and papyrus
    b. Oriental contribution
    c. The development of our alphabet
    d. Manuscript writing
    e. European woodcuts
    f. The development of printing
2. Contribution of graphic arts to modern society
    a. Multi-relationships of printing to other major industries in the nation
    b. Multi-relationships of printing to the daily lives of individuals in our modern society
    c. Increased use of visual communication media by business, industry, government, the professions
    d. Resulting development of new machines, processes and materials
3. Occupational opportunities in graphic arts
    a. By industry classification
        (1) Printing and publishing other than newspapers
        (2) Newspapers
        (3) Allied areas supportive of each
        (4) Education
        (5) Other
    b. By geographical areas
        (1) Nationally
        (2) Regionally
        (3) Locally
    c. By division of labor within the industry
        (1) Various skilled occupations represented
        (2) various unskilled occupations represented
        (3) Relation of sex to employment opportunities in each area
        (4) Educational requirements of each area
        (5) Physical requirements of each area
        (6) Expected working conditions representative of each area
        (7) Relationships with union organizations

        (8) Opportunities for advancement
        (9) Broad advantages and disadvantages associated with jobs representative of the industry
        (10) Anticipated wage scale within the industry

4. Graphic arts as an avocational pursuit
    a. Application of graphic arts learning in school life
    b. Application of graphic arts learning in post school life
    c. Graphic arts learning as a personal hobby

5. Survey of materials used in graphic arts industry
    a. Sources of paper-making materials
    b. Paper production processes
    c. Kinds of paper available for various printing jobs
    d. Sources of materials used in printing
    e. Composition of type material
    f. Parts of a piece of type
    g. Composition and manufacture of printing ink
    h. Importance of lubrication to equipment
    i. Effect of humidity and temperature on printing materials and equipment
    j. Materials associated with duplication systems other than letterpress

6. Cost factors associated with graphic arts processes
    a. Some industry-wide appreciations
    b. Some local applications
    c. Variations within industry by size of establishment
    d. Variations by job size by equipment used
    e. Factors involved in determination of fixed charges
    f. Factors involved in determination of production costs
    g. Within the area of production costs, a somewhat deeper examination of the heavy contribution by labor and equipment

7. Recognition of good visual reproduction
    a. Relation of the process selected to fit job needs
    b. Relation of paper selected to fit job needs
    c. Relation of ink selected to fit job needs
    d. Relation of job skills performed to ultimate outcome
    e. Basic elements of good typographical design

8. Technical terms in common use within the graphic arts industry
    a. Gradual development made of a vocabulary basic to the materials, supplies, and equipment employed by the various duplicating processes discussed and demonstrated
    b. Vocabulary is developed as the need arises

9. Planning the printing job
    a. Basic hand composition
        (1) Introduction to terminology, equipment, materials

        (2) Demonstration of setting, proofing, and distributing type by hand
        (3) Point system and point size
        (4) Relation of linear measurement to point system
        (5) Practicing recommended procedure
        (6) Capitalization and word division
        (7) Reading and marking proof
        (8) Use of reference sources
    b. Preparation of copy
        (1) Understanding its purpose
        (2) Principles of simple balance
        (3) Harmony in relation to type faces and sizes
        (4) Use of color
        (5) Sketching appropriate designs
        (6) Purpose and preparation of layouts
        (7) Figuring simple paper cuts

10. Various duplicating processes within modern graphic arts industry
    a. Basic letterpress process (relief printing) and silk screen can be learned-by-doing in the prevocational general shop
    b. Experimentation through manipulation of the other two basic processes limited to available shop equipment
    c. If such methods are not possible to demonstrate, instruction could be devised through such sources as captioned films, filmstrips, slides, transparencies, charts, samples, displays, reference books and field trips
        (1) Areas broadly covered would include lithography, offset lithography, and photo-offset lithography (planographic printing)
        (2) Gravure process (intaglio printing)
    d. Fundamentals of presswork
        (1) Proofing
            (a) Inking slab and form
            (b) Pulling proofs
        (2) Imposition and lockup: materials and procedures
            (a) Removal of form from galley to stone
            (b) Lock up procedures
            (c) Unlocking and break up of type form
        (3) Fundamental operations of the platen press;
            (a) Equipment and materials needed
            (b) Oiling the press
            (c) Simple make-ready procedure
            (d) Press operation
            (e) Register and other special operations
            (f) Press cleanup

In addition to the aforementioned ten broad learning areas supportive of the previously-stated objectives for graphic arts, a prevocational program in this subject area could include additional work stations set up to accommodate activities in other related areas, with provision made for demonstration and practice with each, among them the following:

1. Common auxiliary equipment such as the:
   a. Slug cutter
      Used for cutting spacing material (lead and slug assortment) into lengths commonly needed in hand composition.
   b. Trimmer saw
      As a precision machine designed to cut metal spacing material, it replaces the slug cutter to a large degree.
   c. Mitering machine
      Makes possible the mitering of corners on borders, producing a neater job than if merely butted together. Instruction in precision adjustments to various angles is required.
   d. Paper drill
      A power-driven hollow drill, this machine replaces the hand-operated paper punch.
   e. Scoring
      Is the striking of a piece of paper with a steel rule at the folding point to make it fold easily and smoothly. Lockup in chase and press make ready procedures are to be learned.
   f. Perforating
      Is an operation similar to scoring, but the specifically designed machine cuts an intermittent line across the sheet.
   g. Paper cutting
      A hand lever (non-powered) cutter is probable best choice for prevocational shop. Technique of properly and safely cutting large sheets into desired sizes is a desirable related learning.
2. Bookbinding
   a. Historical perspective
   b. Modern machine operation
   c. Basic principles of the two major types of hand binding, having limited but common use in the modern graphic arts industry
      (1) Signature binding
      (2) Loose sheet binding
   d. Basic operational procedures related to the padding, stapling, and stitching operations performed in most modern commercial printing plants
3. Papermaking
   a. Follow up historical beginnings with contributions of the modern industry to the graphic arts field

b. Prevocational graphic arts students can learn the basic principles of paper manufacture by trying the hand process and making a simple piece of paper individually Some might even be able to make enough paper to make a short printing press run of a personal greeting card.
c. Materials and tools required
d. Demonstration of procedure
e. Practice of recommended methods

4. Block printing process
   a. An old method, preceding invention of movable type, block printing is not practical for commercial printing
   b. Is a popular activity in modern art classes and could be a work station within the prevocational graphic arts shop
   c. Provides an inexpensive medium for individual expression that can be attractive and useful in making multiple copies
   d. Demonstration of procedure
   e. Materials utilized for tracing, carving, gouging, veining, and outlining
   f. Basic methods of reproducing a given design
   g. Procedures in transferring design to block
   h. Procedures in cutting design into block
   i. Proofreading procedures
   j. Printing the block calls for practiced skills
   k. Cleanup procedures

5. Silk screen printing process
   a. Description of process
   b. Uses made of process
   c. Modern changes in the process
   d. Materials used in the process
   e. Preparing the stencil design
   f. Preparation of printing unit for printing
   g. Preparation of stencil
   h. Printing operational procedures
   i. Cleanup procedures

6. Photography
   a. Is such an important area in modern duplicating methods that it should not be omitted from the curriculum of the progressive prevocation graphic arts program
   b. Background information relative to the science and art of photography
   c. Explanation of a simple camera, basic to all cameras
   d. Demonstration and practice in making a simple camera
   e. Techinques for taking the picture
   f. Techniques for developing the film
   g. Techniques for making prints from the developed negative

7. Offset-lithography process
   a. Explanation of planographic printing principle
   b. Explanation of various methods commonly used today
   c. Basic terminology underlying each area, for
      (1) Lithographic printing
      (2) Offset lithography
      (3) Photo-offset
   d. Demonstration and practice with procedure for making
      (1) Direct-image plates
      (2) Photographic plates
   e. Explanation of procedure for preparing for operating such similar presses as the model 1250 Multilith, the A B Dick, and the Davidson
   f. Demonstration of proper plate installation technique
   g. Demonstration of proper stock-loading of press
   h. Demonstration adjustments for margins and delivery
   i. Demonstration of press run operational procedure
   j. Demonstration of press cleanup after completion of run

8. Intaglio process
   a. Explanation of process
   b. Comparison with relief (letterpress) printing
   c. Comparison with planographic printing processes
   d. Commercial application of the intaglio process
   e. Explanation of metal and plastic plate production
   f. Explanation of inking methods
   g. Explanation of printing the plates

9. Office Duplicators
   a. Though representative of the graphic arts in that they reproduce material for modern offices, they are not considered production machines in the graphic arts industry.
   b. If equipment is not available in the general shop, it can possibly be borrowed from office or obtained from a distributor for demonstration purposes.
   c. Explanation, demonstration and, if possible, practice is desirable on some or all four types of duplicators commonly used in offices today:
      (1) The stencil duplicator or "mimeograph"
      (2) The spirit duplicator (actually, a planographic printing process)
      (3) The offset duplicator (planographic), adapting improved techniques in making plates directly from printed copy, by-passing camera and negative, is an extremely flexible process ideally suited for office duplicating work.
      (4) The photo-copier is becoming increasingly commonplace in the modern office.

d. Explanation and, if possible, demonstration and practice relating to the principle of the modern small automatic folding machines is a desirable learning experience.

e. The prevocational teacher is referred to the instruction manuals of the many manufacturers of all four types of office duplicators and automatic folding machines for specific operational procedures to follow.

Implementation

Throughout the foregoing introductory remarks the intent has been to:

1. Review both the historical and contemporary role of graphic arts in our society and, within that framework, the need of modern education to relate to graphic arts with desirable objectives, outcomes and activities of its own.
2. Suggest, within the school program of graphic arts education for the deaf, broad guidelines for implementing such desirable objectives, outcomes, and activities on an exploratory, prevocational level.
3. Explore, but not in depth, several activity areas that feasibly would provide deaf youth with the opporunity to become acquainted with the materials and tools associated with basic duplicative processes and related learnings upon which he may well find economic and social stability in his post-school years.

It is the purpose of this final section to provide the reader with a relatively detailed working sample of an activity indicative of that which, on a local level, would need to be provided by the prevocational graphic arts teacher to achieve desired learning outcomes. Among literally hundreds of such activities throughout the entire graphic arts school program, that of proofing and correcting, within the larger framework of letterpress printing, has been selected to suggest possible implementation in all areas.

Activity: Proofing and Correcting

Purpose

A. to check accuracy, clarity, legibility of type set up in form

B. to make all necessary corrections, including sufficient rechecks for accuracy, clarity, and legibility

Desired Outcomes

A. to develop in the pupil a felt need to be accurate and careful

B. to promote good work habits embracing attention to detail

C. to strengthen observation and analysis of pupil's own work

D. to provide each pupil with opportunity to locate, mark, and correct his own mistakes

E. to enlarge each pupil's understanding of the need for, purposes of, and skills related to this single activity within the larger framework of a pressman's overall duties.

Equipment and Materials

A. proof press	E. ink knife
B. ink slab	F. type brush
C. brayer	G. cleaning solvents
D. newsprint paper	H. wiping cloths

Activities

- A. galley proof in the proof press
  - 1. inking the slab
  - 2. placing the galley in the proof press
  - 3. inking the form with the brayer
  - 4. eliminating proof slurs
- B. planer proof
  - 1. inking the form
  - 2. preparation of paper
  - 3. use of proof planer and mallet
- C. cleaning type
  - 1. wiping form with dampened cloth (solvent)
  - 2. use of the type brush
- D. proofreading
  - 1. knowing and using standard proof marks
  - 2. marking the proof
- E. correcting type
  - 1. in the galley
    - a. carefully using tweezers
    - b. checking justification of the line
  - 2. in the stick
    - a. positioning of stick
    - b. breaking type form
    - c. transferring line to stick
    - d. correcting and rejustifying
    - e. returning line to form

Supportive Media

Books

Carlson, Darvey E. *Graphic Arts*. Charles A. Bennett Co., Inc. Peoria, Illinois. 1965.

Karch, R. Randolph and Buber, Edward J. *Graphic Arts Procedures*. American Technical Society. Chicago. 1967.

Films

Learning to Set Type	Bailey Films
Letterpress Printing	Bailey Films
Bookbinding	Brandon
Printing Through the Ages	Encyclopedia Britannica

Filmstrip

Photo-Offset Printing	Eastman Kodak

Pamphlets and Manuals

Altomare, Maurice. *Photo-Offset Printing and Commercial Photography* (Vol. 1). New Jersey School for the Deaf. West Trenton, New Jersey. 1964.

Curry, Harold A. *Linecasting Keyboard Operation*—1. Marie Katzenbach School for the Deaf. West Trenton, New Jersey. 1966.

Hague, C. W. *Printing Instruction Sheets*. Bruce Publishing Co. Milwaukee. 1961.

Lush, Clifford L. *Junior Letterpress and Lithography*. Charles A. Bennett Co., Inc. Peoria, Illinois. 1963.

EXPLORATORY MECHANICAL DRAWING

Purpose

The purpose of this area is to allow the student the opportunity to investigate some of the problems in and relative to the language of drawing. He is also afforded a means of developing the ability to visualize and to express graphically his own ideas and the ideas of others.

Desired Outcomes

To develop:

A. an appreciation of accuracy and neatness
B. an ability to use and care for common draftsman's tools
C. some skills in the fundamental process of drafting
D. interest in the language of drawing
E. an ability to translate visualized concepts into workable drawings
F. the ability to correlate drawing with other areas of learning
G. the ability to interpret the ideas of others as expressed in drawings
H. clearness in self-expression
I. attitudes conducive to good work habits
J. cooperative spirit
K. latent abilities in the area of drafting and art

Content

A. orientation to shop, tools and procedures
B. proper use and care of tools and use of materials
C. identification of tools and materials
D. lettering
E. tracing
F. pattern making
G. encouragement of originality and self-expression

Activities

A. Make simple drawings using basic lines and tools.

B. Progress to working drawings: multives, sectional, sketching.
C. Make pictorial drawings: isometric, oblique, sketching.
D. Make pencil tracings.
E. Make single stroke gothic letters, inclined and vertical.
F. Make drawings for projects involving other departments.
G. Take field trips to drafting firms, observe procedures and blueprint making.

Materials and tools

A. drafting table, stool, and drawing board
B. drafting tools such as T square, triangles, compass, divider, pencils, etc.

Supportive Media

Films:

Shop Procedures-Mechanical Drawing	McGraw Hill Book Co.
Make A House Model	James Love
Metal Craft	Encyclopedia Britannica

Books:

______. *Drafting Curriculum Guide for Industrial Arts.* City of Chicago Press, Board of Education. Chicago, Illinois. 1963.

______. *A Guide for Improving Industrial Arts Instruction.* American Vocational Assoc. Washington, D. C.

GENERAL SHOP AREAS

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WOODS

Introduction

One of the most interesting shop activities is woodworking. It provides the student with an opportunity to learn to use many woodworking tools and machines, and to investigate some of the problems relative to the fundamentals of woodworking. It is also a means of self-expression through manipulation of various materials in constructing projects. Many students will find woodworking an enjoyable leisure-time activity and a means of determining their abilities and interests as future workers in industry.

Purpose

The purposes of this area of instruction are as follows:

A. to provide each student with a knowledge of wood, its tools and its uses
B. to develop in each student an appreciation of good wood design and workmanship
C. to acquaint each student with the use of wood in the home and in industry
D. to develop in each student skill in the use of common woodworking tools and machines
E. to develop in each student desirable work attitudes and practices
F. to develop in each student the habit of efficient and orderly performance of tasks

Desired Outcomes

A. to understand how to use and care for woodworking machines and tools
B. to acquire the skills necessary for constructing various wood articles
C. to develop a knowledge of the different kinds of woods, their care and uses
D. to gain an understanding of the characteristics of wood

Content

A. plan and lay-out a pattern
B. properly square a board
C. assemble wood with various fastenings and adhesives
D. hold stock by various methods
E. sand wood
F. finish wood with various products

Activities

Make any one or several of the following as individual projects:

A. lamp base

B. rack or holder
C. table
D. birdhouse
E. stool
F. letter opener
G. name plate
H. scrapbook cover
I. sewing, tool or game box
J. carved figures
K. candy dish
L. serving tray

Tools and Materials

A. various types of hand saws
B. claw hammers
C. various metal fastenings
D. drills and bits
E. measuring instruments
F. various types of adhesives
G. various wood holding devices
H. braces
I. squares - try, combination and framing
J. various types of files
K. various types of planes
L. screwdrivers
M. knives, chisels and other wood cutting tools
N. pliers
O. scissors
P. simple power tools
Q. paint, stain, shellac and other finishing products
R. sandpaper

Supportive Media

Books

Cramlet, Ross C. Woodwork Visualized. The Bruce Publishing Co., Milwaukee, Wisconsin. 1967.

Douglas, J. H. , Penny, Forest L., and Roberts, R. H. *Units in Woodworking.* McCormick-Mathers Publishing Co., Inc. Wichita, Kansas. 1967.

Feirer, John L., *Advanced Woodwork and Furniture Making.* Charles A. Bennett Co., Inc., Peoria, Illinois. 1963.

Feirer, John L., *Industrial Arts Bench.* Charles A. Bennett Co., Inc., Peoria, Illinois. 1965.

Feirer, John L., *Industrial Arts Woodworking.* Charles A. Bennett Co., Inc., Peoria, Illinois. 1963.

Groneman, Chris H. and Glazener, Everett R. *Technical Woodworking.* McGraw Hill Book Co., New York, New York. 1966.

Films

The ABC of Hand Tools	Walt Disney Productions
A Film on Unicom	National Lumber Association
Furniture Craftsman	Encyclopedia Britannica
Houses Have Four Sides	Association Films, Inc.
The Lumber Yard	Bailey Films
Metal, Glass and Paper	Ball Manufacturing Co.
Miracle in Wood	American Plywood Association
Perceptual Harvest	Telesound Film Recording, Ltd.
Ripping and Cross-cutting	U.S. Office of Education Film Service
Technology with Art	Browning Arms Co.
Woodworking	Encyclopedia Britannica

Filmstrips

Basic Shop Safety	The Jam Dandy Organization
Boring Tools for Woodworking	Stanley Tools
Chisels for Woodworking	Stanley Tools
Hammers, Screwdrivers, Nails and Screws	Stanley Tools
Hand Saws for Woodworking	Stanley Tools
How We Get Our Homes	Society for Visual Education, Inc.
Measuring, Testing and Making Tools for Woodworking	Stanley Tools
Planes	Stanley Tools
The Story of Building a House	Eye-Gate House, Inc.
The Story of Coated Abrasives	Society for Visual Education, Inc.
Use of Machines in Our Industrial Life	McGraw Hill Book Co.
The Woodworking Series	McGraw Hill Book Co.
Woodworking Tools and Machines	The Jam Dandy Organization
The Work of Simple Machines	Society for Visual Education, Inc.

Transparencies

Usage of Tools	Stanley Tools
Stanley Power Drill	Stanley Tools

METALS

Introduction

Metals, especially steel, play a very important role in American industrial life. A large part of the total tonnage of the iron and steel mills of our country is rolled into sheets and sold to manufacturers. These manufacturers produce enumerable products that are purchased and used by almost everyone throughout the country.

Metal has many characteristics in its favor as a material to be used in construction. It is durable, easily fabricated, fireproof, easily repaired, and does not warp because of moisture. Some new metal alloys are lightweight, very attractive in appearance, and resist corrosion.

The study of metals is designed to give the student a knowledge of the materials, tools and finishes in different areas of metal work. It is also designed to aid the student in gaining some knowledge of the vocational opportunities and requirements in the metal trades.

Purpose

The purposes of this area of instruction are as follows:

A. to provide each student with a knowledge of metals, its tools and its uses
B. to develop in each student an appreciation of good metal design and workmanship
C. to acquaint each student with the use of materials in the home and in industry
D. to develop in each student desirable work habits, attitudes and practices
E. to develop in each student skill in the use of common metal working tools and machines
F. to develop in each student the habit of efficiency and orderly performance of tasks.

Desired Outcomes

A. to understand how to use and care for metal working machines and tools
B. to acquire the skills needed in constructing various metal articles
C. to understand where, when, and why various metal techniques are used
D. to develop a knowledge of the kinds of metals, their care and uses
E. to gain an understanding of the characteristics of metal
F. to gain an understanding of the processes involved in producing common metals.

Content

A. design a pattern or template
B. measure and lay-out from a plan
C. anneal metal
D. saw metal
E. cut metal
F. drill metal
G. bend and fold metal
H. form metal

I. solder metal
J. fasten metal
K. file metal
L. etch metal
M. engrave metal
N. buff
O. apply various metal finishes

Activities

Make any one or several of the following as individual projects:

A. dust pan
B. pot holder
C. tray
D. chisel
E. letter opener
F. spatula
G. bicycle luggage carrier
H. biscuit cutter
I. sugar scoop
J. shelf brackets
K. jewelry

Tools and Materials

A. bench grinder
B. welding equipment
C. forging
D. soldering
E. various shears and punches
F. drill press
G. forming machines
H. various types of hammers
I. tin snips
J. rules
K. files
L. hack saws
M. hand groovers
N. pliers
O. cold chisels
P. rivet sets
Q. scribes
R. mild metal
S. sheet metal
T. welding and soldering supplies
U. finishing materials

Supportive Media

Books

Feirer, John L. *General Metals*. McGraw Hill Book Co., Inc., New York, New York. 1959.

Feirer, John L. and Lindbeck, John R. *Industrial Arts Metalwork*. Chas. A. Bennett Co., Inc., Peoria, Illinois. 1965.

Glenn, Harold T. *Exploring Power Mechanics*. Chas. A. Bennett Co., Inc., Peria, Illinois. 1967.

Johnson, Harold V. *General-Industrial Machine Shop*. Chas. A. Bennett Co., Inc., Peoria, Illinois. 1963.

Films

The ABC of Hand Tools	Walt Disney Productions
Beauty in Precious Metal	Browning Arms Company
Bright Steel	Bethlehem Steel
The Common Denominator	Modern Talking Picture Co.
Designing Machinery for Arc Welding	Lincoln Welding Co.
Die Casting—How Else Would You Make It?	Modern Talking Pictures Co.
Drawings and the Shop	McGraw Hill Book Co., Inc.
Drill Press—Basic Holding Techniques	Encyclopedia Britannica
Farmer Brown—Steelworker	Thomas Banbre
Grinding Basic Lathe Tool Cutter Bits	South Bend Lathe Works
Houses Have Four Sides	Association, Inc.
Knowing is not Ehough	Film Distribution Centers
The Lathe	DuArt Film Laboratory
Machines Help Us	Bailey Film Co.
The Magic Wand of Industry —Arc Welding	Lincoln Electric Co.
The Making, Shaping and Treating of Steel	U. S. Steel
Metal Craft	Encyclopedia Britannica
Micro-Wire Pipe Welding	Hobart Brothers
The Milling Machine	DuArt Film Laboratories
Modern Steel Making	U. S. Steel
Precision Tool Making and Machining	National Tool, Die, and Precision Machining Association
Rhapsody of Steel	U. S. Steel
Shape Description	McGraw Hill
The Shaper	DuArt Film Laboratories
Shop Procedures	Encyclopedia Britannica
Steel and America	U. S. Steel
Technology with Art	Browning Arms Co.
T G 3 Surface Grinder	Rockwell Manufacturing Co.
To Be Forged	Modern Talking Pictures, Inc.
Tools and Rules for Precision Measuring	Starrett
Welding Advances with Aluminum	Aluminum Company of America

Filmstrips	
Basic Shop Safety	Jam Handy
The Cradle of American Industry	American Iron and Steel Institute
Introduction to Machining	Jam Handy
Machines in our Industrial Life	McGraw Hill
Metallic Elements	Filmstrip House
Metalworking Series	McGraw Hill
Oxyacetylene Welding	Jam Handy
Raw Materials of Steelmaking	American Iron and Steel Institute
The Story of Coated Abrasives	Society for Visual Education, Inc.
Story of Steel	Society for Visual Education, Inc.
Work of Simple Machines	Society for Visual Education, Inc.
Slides	
Causes and Cures of Common Welding Troubles	Hobart Brothers
Welding Fundamentals	Hobart Brothers
Transparencies	
Portable Electric Tools	DCA Educational Products, Inc.
Stanley Power Drill	Stanley Tools
Posters	
Safety Sam Says . . .	Atlas Clausing Mfg., Co.

INDUSTRIAL HANDICRAFTS

The general purpose of industrial handicrafts are to make the student aware of the industrial opportunities for which he may prepare himself and to give him a better understanding of his relationship to the world of work. It should be emphasized that although well-made products are desirable, the end product is not the most important educational aspect of a course. The more important educational aspects of working in the crafts are evaluated in terms of the techniques used and discovered by the student and the desirable attitudes he learns regarding people in industry and the various roles they play.

Curriculum guideline materials follow for three industrial handicraft areas which might be appropriate for the school for the deaf prevocational program; plastics, ceramics and leatherworking.

PLASTICS

Introduction

Plastics and the plastic industry play an increasingly more important role in modern living. Because of the adaptability, beauty, strength, and infinite variety of uses of plastics, this industry has experienced continous development and improvement and is expanding at a rapid rate. Because of the basic qualities of plastic and its ever increasing economic and practical importance in our lives, a study of this material should be included in prevocational programs.

Some of the purposes of the study of plastics are to acquaint the student with the origin and background of plastics, its costs and sources of supply, its limitations, common types of plastics, use of plastics, tools used with plastics, and the care of plastic products.

The degree to which work in plastics can be explored depends upon the facilities available. Many techniques of working with plastic require that neither teaching personnel nor laboratory equipment be altered. Other techniques require special training of the instructor and the use of special equipment.

Purpose

The purposes of this area of instruction are as follows:

A. to provide each student with a knowledge of plastics, its tools and its uses
B. to develop in each student skill in the use of tools and materials used in constructing plastic articles
C. to develop in each student an appreciation of good plastic design and workmanship
D. to acquaint each student with use of plastics in the home and in industry
E. to develop in each student the habit of efficient and orderly performance of tasks
F. to develop in each student the desirable work attitudes and practices

Desired Outcomes

A. to develop a knowledge of the kinds of plastics, their care and uses
B. to develop the ability to plan and execute a project in plastic
C. to gain understanding about the characteristics and limitations of plastic
D. to gain understandings about the sources of and costs of plastics

Content

Perform the following operations with plastic:

A. plan a procedure for a project
B. create an original design

C. lay-out a design
D. mark
E. cut and saw
F. punch and rill
G. turn
H. file and sand
I. clean
J. buff
K. form and bend
L. joint
M. dye and paint
N. inlay and overlay
O. laminate
P. embed objects in
Q. cement
R. join with various screws
S. plane
T. mold
U. expand
V. cast

Activities

Make any one or several of the following articles as individual projects:

A. puzzle
B. telephone dialer
C. coin purse
D. letter opener
E. name plate
F. stamp box
G. belt
H. handbag
I. set of coasters
J. bookends
K. buttons
L. ornaments

Tools and Materials

A. saws
B. files
C. sandpaper
D. rotary tools
E. knives
F. scratch awl
G. drills and punches
H. cement and glue
I. screws
J. jigs and fittings
K. planes

L. dyes, lacquers, etc.
M. plastics of various types
N. specialized machines—vacuum—forming, blow molding, heat-pressure chamber, etc.

Films

A New World of Chemistry	Reichhold Chemicals, Inc.
Magic Molecule	Consulate General of Canada
Shape and The Future	Modern Talking Picture Service
The Waiting Harvest	United States Steel Corporation

CERAMICS

Introduction

Ceramics is one of the oldest crafts practiced by man. It is a broad area which has been divided into many specialized areas such as, white wares, glass, clay products, etc. Techniques for making clay products are relatively simple and can be utilized in the vocational shop.

Purpose

The purposes of this area of instruction are as follows:

A. to acquaint each student with the history, types, characteristics, and sources of ceramics
B. to provide each student with a knowledge of the use and care of ceramics
C. to develop in each student an appreciation of good ceramic design and workmanship
D. to develop in each student skill in the use of tools and machines associated with ceramic making
E. to develop in each student desirable work attitudes and practices
F. to develop in each student the habit of efficient and orderly performance of tasks

Desired Outcomes

A. to understand how to use and care for tools and machines associated with ceramic making
B. to acquire the skills necessary for constructing ceramic articles
C. to develop a knowledge of the various kinds of ceramics, their care and uses
D. to gain an understanking of the characteristics of ceramics

Content

To learn to use the necessary tools and to perform the following operations with clay:

A. plan and design with clay

B. mix
C. wedge
D. model
E. mold
F. slip-cast
G. cut
H. join
I. glaze
J. fire
K. slip paint
L. use a potters wheel

Activities

A. pot
B. figurine
C. vase
D. bowl
E. box
F. an ash tray
G. some jewelry
H. had sculptured animals, automobiles,etc.

Tools and Materials

A. modeling tools
B. scrapers and texturing tools
C. wedge board
D. various types of clay
E. kiln
F. glazers
G. potters wheel

SUPPORTIVE MEDIA

Films

Making of Fine China	Lenox Co.
Metal, Glass and Paper	Robert M. Carson
Pottery Making	Encyclopedia Britannica
Decoration in Clay	Indiana University
Glaze Application	Indiana University
Simple Molds	Indiana University
The Simple Slab Method	Indiana University
Stacking and Firing	Indiana University
Throwing	Indiana University

LEATHER

Introduction

Leather has been used and developed through the ages. It plays an important part in modern industry. Students should explore its potentials to gain an understanding and appreciation of the role leather plays in everyday living.

Purpose

The purposes of this area of instruction are as follows:

- A. to acquaint each student with the history, types, characteristics and sources of leather
- B. to provide each student with a knowledge of the use and care of leather
- C. to develop in each student an appreciation of good leather design and workmanship
- D. to develop in each student desirable work habits, attitudes and practices
- E. to develop in each student skill in the use of tools and machines used in leathercraft
- F. to develop in each student the habit of efficient and orderly performance of tasks.

Desired Outcomes

- A. to understand how to use and care for tools and machines used in leathercraft
- B. to acquire the skills necessary for constructing leather articles
- C. to develop a knowledge of the various kinds of leather, their care and uses
- D. to gain an understanding of the characteristics of leather

Content

- A. plan and design
- B. prepare to be worked
- C. lay out template
- D. mark
- E. cut
- F. crease
- G. punch
- H. finish
- I. tool
- J. bevel
- K. skive
- L. stamp
- M. dye
- N. fasten by various means
- O. transfer designs

Activities

- A. belt
- B. comb case
- C. stationary case
- D. key case
- E. wallet
- F. book cover
- G. wrist band

Tools and Materials

A. awls
B. bevelers
C. cutting boards
D. chisels
E. creasers
F. fids
G. knives
H. mallets
I. various modeling tools
J. needles
K. punches
L. eyelet setters and spreaders
M. shears
N. skivers
O. snap fasteners
P. stamp-carving set
Q. tracers
R. leather
S. glue

SUPPORTIVE MEDIA

Films:

Leather in the Making	Brown Shoe Company
Leather in Your Life	Leather Industries of America, Inc.
Story of Ohio Leather	The Ohio Leather Company
Story of Tioga Oak Sole Leather	Eberle Training Company

Filmstrips:

Leathercraft Ideas	Visual Educational Consultants

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of
Printed materials on
Prevocational Education

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ANNOTATED EDUCATIONAL MEDIA

General Prevocational Education:
Woods, Metals, Graphics, Crafts, Business Education

Title:
THE ABC'S OF HAND TOOLS
Medium:
film
Producer:
Walt Disney Productions
Distributor:
General Motors Corp.
(free loan)

Color—Black & White:
color
Length:
31 minutes
Area:
Prevocational
Subject:
Use of hand tools

Annotation: Animated illustration of the various types and uses of such basic hand tools as hammers, screw drivers, pliers, wrenches, chisels, planes, punches, drills, bits, files, and saws. The film has detailed close-ups, good organization of tools—and their misuse, and smooth transition among the various tools depicted to make this an especially desirable film for prevocational orientation to general shop courses.

Major Purpose: To introduce students to types and uses of basic hand tools

Technical Quality (sound, photography, etc.): excellent

Interest and Reading Levels: intermediate

High Low
Overall Rating: 5 4 3 2 1

Title:
ARC WELDING SERIES
Medium:
filmstrip
Producer:
McGraw Hill Book Co.
Distributor:
McGraw Hill Book Co.

Color—Black & White:
color
Length:
3 filmstrips
Area:
Prevocational
Subject:
Arc Welding

Annotation: Film Titles are self-explanatory.
ELECTRIC ARC WELDING AND HOW IT HELPS MAN
SELECTING AND USING EQUIPMENT
PRACTICING ARC WELDING

Major Purpose: To acquaint students with the skilled trade of arc welding

Technical Quality (sound, photography, etc.): good

Interest and Reading Levels: senior high

High Low
Overall Rating: 5 4 3 2 1

Title:
BASIC SHOP SAFETY
Medium:
filmstrip
Producer:
Jam Handy Organization

Color—Black & White:
black & white
Length:
7 filmstrips
Area:
Prevocational

Distributor: Jam Handy Organization	**Subject:** Shop Safety

Annotation: Separate titles suggest series content: MAINTAINING A SAFE, SHOP; SAFETY INSPECTION; TREATMENT FOR BLEEDING; EYE PROTECTION; FAINTING AND BURNS; POWER SUPPLY ACCIDENTS; TRAINING FOR EMERGENCIES.

The separate sections of each of the seven broad areas is followed by a short quiz after the presentation. For example: MAINTAINING A SAFE SHOP includes a quiz after subsections "Aisles, floors, and stairways," a test after subsection "Wiping Cloths and Nails," a test after "Storing and Handling Materials," and so-on through the separate subsections of each subject area strip.

Major Purpose: To promote safe practices in shop areas

Technical Quality (sound, photography, etc.): fair to good

Interest and Reading Levels: junior high

High Low
Overall Rating: 5 4 3 2 1

Title: BEAUTY IN PRECIOUS METAL	**Color—Black & White:** color
Medium: film	**Length:** 20 minutes
Producer: Herff-Jones Co.	**Area:** Prevocational
Distributor: Association Films (free loan)	**Subject:** Manufacturing high-quality class rings.

Annotation: This film shows modern production techniques combined with the age-old artistry of highly skilled individual craftsmen. Through the medium of fine class ring production, the exploratory student can see exquisite beauty created in precious metal.

He sees sketched ideas take detailed shape and become two-dimensional, full color works of art; then three-dimensional forms in gold; then in steel, as long-apprenticed engravers and die makers ply their skilled trades.

Actual production begins with striking the die. Briefly, the student sees the metallurgical operations of alloying and annealing gold; of hardening steel striking dies and of brazing shank to base. He sees rounding and sizing operations, the exact comparisons made of the developing ring with the original die. He sees required enamel being applied by highly trained technicians using a brush. He also sees artisans whose skill demands steady nerves and hands.

The exploratory student sees other craftsmen firing enamel. He also sees others stoning enamel and demonstrating their polishing and buffing techniques with the jeweler's abrasives.

Other technicians with dental drills prepare the way for the stone men—experts with the setting hammer; other experts follow with delicate precision filing skills.

Major Purpose: This film is good for demonstrating the large variety of hand and machine skills in making class rings.

Technical Quality (sound, photography, etc.): good

Interest and Reading Levels: junior high, senior high

High Low
Overall Rating: 5 4 3 2 1

Title:
BRIGHT STEEL
Medium:
film
Producer:
Bethlehem Steel Co.
Distributors:
Modern Talking Pictures
(free loan)

Color—Black & White:
color
Length:
30 minutes
Area:
Prevocational
Subject:
Stell Production

Annotation: This film depicts the genius of the steel industry's production methodology through such familiar household objects as the common food container and the bottle cap. It takes the viewer from rolled sheet steel through various production processes and machinery to find the final product numbered in the millions units. Also shown are the art production processes, transforming plain cans into attractive kitchen cannisters. The film traces the flow of steel from iron ore shipments through refining and steel production to packaging and distribution of finished product, bringing the viewer full circle back to the beginning.

Major Purpose: To demonstrate production methods of common household objects

Technical Quality (sound, photography, etc.): excellent

Interest and Reading Levels: intermediate, junior high, senior high

High Low
Overall Rating: 5 4 3 2 1

Title:
CAUSES AND CURES OF COMMON WELDING TROUBLE
Medium:
slides
Producer:
Hobart Brothers Co.
Distributor:
Hobart Brothers Co.
(free loan)

Color—Black & White:
color
Length:
12 slides
Area:
Prevocational
Subject:
Welding

Annotation: Each slide employs black copy on a yellow background to illustrate, in turn, each welding problem type, why it is caused, and what to do to correct each. Types are: (1) distortion, (2) brittle welds, (3) porous welds, (4) spatter, (5) cracked welds, (6) poor penetration, (7) warping, (8) poor appearance, (9) magnetic blow, (10) undercutting, (11) poor fusion, and (12) weld stresses.

Major Purpose: To reinforce actual teacher demonstration of improper welds and how to correct them

Technical Quality (sound, photography, etc.): excellent photography

Interest and Reading Levels: junior high, senior high

General Comments: Series is too technical and advanced for use instruction wise in the general prevocational shop, but has reinforcement value to the instructor's own demonstrations.

High Low
Overall Rating: 5 4 3 2 1

Title:
CRAFT SERIES
Medium:
filmstrip
Producer:
Visual Education Consultants, Inc.
Distributor:
Visual Education Consultants, Inc.

Color—Black & White:
both
Length:
5 filmstrips
(21-45 frames)
Area:
Prevocational
Subject:
Hand crafts

Annotation: The following four strips from the series have possibilities for prevocational training:
HOW TO MAKE A PICTURE FRAME
THE UP AND DOWN OF FABRICS
SILK SCREEN PRINTING
LEATHERCRAFT IDEAS

Major Purpose: To acquaint the prevocational student generally with basic handicrafts

Technical Quality (sound, photography, etc.): good

Interest and Reading Levels: intermediate, junior high, senior high

High Low
Overall Rating: 5 4 3 2 1

Title:
CRAFTSMANSHIP IN CLAY
Medium:
films
Producer:
Indiana University

Color—Black & White:
color
Length:
6 films (11 minutes each)
Area:
Prevocational

Distributor:
Indiana University

Subject:
Ceramics

Annotation: The following titles of the series are self-explanatory.

DECORATION IN CLAY
GLAZE APPLICATION
SIMPLE MOLDS
THE SIMPLE SLAB METHOD
STACKING AND FIRING
THROWING

Major Purpose: To show simple molds, decorations, glaze applications, throwing, stacking and firing, and a simple slab method

Technical Quality (sound, photography, etc.): excellent

Interest and Reading Levels: junior high, senior high; sixth grade reading level

High Low
Overall Rating: 5 4 3 2 1

Title:
DRILL PRESS: BASIC HOLDING TECHNIQUES

Color—Black & White:
color

Medium:
film

Length:
7 minutes

Producer:
Encyclopedia Britannica

Area:
Prevocational

Distributor:
Encyclopedia Britannica

Subject:
Drill press

Annotation: Illustrates and describes the four basic holding techniques: by hand, with pliers, the drill press vice, and the drill press table. Film is short and basic.

Major Purpose: To give the student a background in the four basic holding techniques of the drill press

Technical Quality (sound photography, etc.): good

Interest and Reading Levels: junior high

General comments: intermediate

High Low
Overall Rating: 5 4 3 2 1

Title:
ENERGETICALLY YOURS

Color—Black & White:
color

Medium:
film

Length:
14 minutes

Producer:
Modern Talking Pictures

Area:
Prevocational

Distributor:
Modern Talking Pictures
(free loan)

Subject:
Energy

Annotation: A delightful cartoon treatment of man's material progress through the new energy sources from animal to atom. It shows how man has used his intellect to extend his horizons.

Major Purpose: To show how man has utilized different energy sources from animals to atom.

Technical Quality (sound, photography, etc.): good

Interest and Reading Levels: senior high; sixth grade reading level

High Low

Overall Rating: 5 4 3 2 1

Title: FARMER BROWN—STEELWORKER	**Color—Black & White:** color
Medium: film	**Length:** 32 minutes
Producer: Colorado Fuel and Iron Corp.	**Area:** Prevocational
Distributor: Thomas J. Barbre Productions (free loan)	**Subject:** Steel production

Annotation: The film shows that steel production requirements are basically similar throughout the United States. However, this film is unique among the usual variety of "steel making" films because it gives broad coverage to the methods and techniques used at the West's largest mill at Pueblo, Colorado; and because the end product is tubular and wire steel that is used to meet the special needs of western ranchers and farmers for fencing, bailing etc. As such, the production and rolling scenes observed by the exploratory student trace the hot steel production from ingots to square billets to round rods to 750-lb. coils. Cooled, the now-cold coils are shown being drawn down into the coiled wire, from which are made the special-need products used on western ranches.

Major Purpose: To explain how steel is made in the western United States

Technical Quality (sound, photography, etc.): excellent

Interest and Reading Levels: junior high

High Low

Overall Rating: 5 4 3 2 1

Title: HOW TO MAKE A SIMPLE LOOM AND WEAVE	**Color—Black & White:** color
Medium: film	**Length:** 15 minutes

Producer:
Encyclopedia Britannica
Distributor:
Encyclopedia Britannica

Area:
Prevocational
Subject:
Loom making and weaving

Annotation: The film shows youth learning how to build his own small loom, using coping saw and square, hammer and nails. He demonstrates finger dexterity in following instructions for preparing his loom to receive available materials, and experiences weaving such materials as cotton and wool yarns, raffia, bamboo, etc.

Major Purpose: To acquaint the student with methods of making a loom and using it.

Technical Quality (sound photography, etc.) good

Interest and Reading Levels: intermediate, junior high

General Comments: Excellent coverage for an important craft area in an exploratory program.

High Low
Overall Rating: 5 4 3 2 1

Title:
HOW WE GET OUR HOMES
Medium:
filmstrip
Producer:
Society for Visual Education, Inc.
Distributor:
Society for Visual Education, Inc.

Color—Black & White:
color
Length:
4 filmstrips
Area:
Prevocational
Subject:
Home ownership concepts

Annotation: The series covers all major aspects of building one's own home, from lot purchase to housewarming. The exploratory student sees the myriad of skills and services that comprise such a major personal enterprise; real estate sales, architectural planning, financing, excavation, outside and inside carpentry and finishing, plumbing, wiring, roofing, flooring, heating, tile laying, cabinet working, and so on. Each filmstrip includes a summation statement. The titles of each of the four parts in the series are:
PLANNING THE HOME
BUILDING A FOUNDATION
BUILDING THE SHELL OF THE HOUSE
FINISHING THE HOME

Major Purpose: To provide basic knowledge in all major facets of a personal home-building program

Technical Quality (sound, photography, etc.): excellent

Interest and Reading Levels: intermediate

General Comments: A comprehensive coverage for the prevocational student.

High Low
Overall Rating: 5 4 3 2 1

Title:
LEARNING TO SET TYPE
Medium:
film
Producer:
Bailey Films, Inc. A Whitten-Appleton Production
Distributor:
Bailey Films Inc.
(free loan)

Color—Black & White:
black & white
Length:
11 minutes
Area:
Prevocational
Subject:
Hand setting of type

Annotation: This film is appropriate to general prevocational learnings as it gives the beginning student practical suggestions for working with hand-set type, right down to the exercise of proper care and precautions that should be taken in removing the case from the cabinet. It covers also such other learnings as proper holding of the stick, and the setting of type—including the proper hand, elbow, and foot positions in so doing. The film also covers the "spelling-words-back" technique of distributing type from the stick.

Major Purpose: To demonstrate the steps which must be taken by the beginning printing student in hand setting a line of type

Technical Quality (sound, photography, etc.): excellent; fair to good sound for hearing student

Interest and Reading Levels: intermediate, junior high

High Low
Overall Rating: 5 4 3 2 1

Title:
THE LUMBER YARD
Medium:
film
Producer:
Bailey Films, Inc.
Distributor:
Bailey Films, Inc.
(free loan)

Color—Black & White:
color
Length:
11 minutes
Area:
Prevocational
Subject:
Forest, mill, and retail yard goods and services

Annotation: This film relates the "story" of lumber production from forest to form utility by the eventual purchaser, played by a father and son who wish to build a shelter for a boy's dog. We see the chain saw operator felling the trees in the forest and the truck driver delivering it to the saw mill, where a crane drops it into a mill pond. Now, to hand operation, as workers guide the log on to the chute that carries it up and into powerful water jets that remove the bark, prior to sawing it into boards. Here, the prevocational student sees experienced and skilled workmen operate the equipment that "flips" each log into position for cutting into desired board lengths and widths.

Next seen are the transportation operations from mill to distant markets, in quantity, by rail and ship; then on to numerous lumberyards in smaller units. Here, drivers operate mechanical carriers to move piles of lumber from place to place, as required by skilled workmen who hand-grade each piece by size, quantity, etc. Trucks are loaded by stack lifts and driven to building sites about the city. Other related functions of a retail lumber yard are also noted as our family is seen dealing with various salesmen for lumber, plywood, nails and wire screen.

Briefly seen are hand-operations of wire snipping and sawing. The film ends with a review of desired learning to which the exploratory student has been exposed.

Major Purpose: To illustrate the different types of occupations found in a lumber yard

Technical Quality (sound, photography, etc.): excellent

Interest and Reading Levels: intermediate; third grade reading level

High Low
Overall Rating: 5 4 3 2 1

Title:
MACHINES HELP US
(Second edition)

Medium:
film

Producer:
Bailey Films, Inc.

Distributor:
Bailey Films, Inc.
(free loan)

Color—Black & White:
color

Length:
11 minutes

Area:
Prevocational

Subject:
Basic Machines

Annotation: Basic premises necessary to understanding our mechanical age are introduced through a series of three questions, each of which is in turn stated, discussed, and restated for optimum clarity and understanding. Through this method, the film makes the points that: machines are tools that help us do work; new machines usually are developed from older ones; almost everything we do is done by machines and almost everything we use is made by machines. The film develops the thesis that in many ways we live in a world where machines are servants which help us to raise our standard of living.

Major Purpose: To explain the role played by machines in our economy

Technical Quality (sound, photography, etc.): excellent

Interest and Reading Levels: intermediate, junior high

High Low
Overall Rating: 5 4 3 2 1

Title:
THE MAGIC WAND OF INDUSTRY
Medium:
film
Producer:
Wilding Productions
Distributor:
Lincoln Electric Co.
(free loan)

Color—Black & White:
color
Length:
18 minutes
Area:
Prevocational
Subject:
Arc Welding

Annotation: This film makes strength-weight-cost comparisons between cast iron and riveted machine parts versus those of arc-welded steel. Animation is used to illustrate the chemical reactions undergone in arc welding. Actual scenes from industry illustrate some of the many individual industrial uses for arc-welding steel. Though cars and clothing are 1945 vintage, the techniques and work operations are in widespread use today.

Major Purpose: To give students a background in the strength, weight and cost of cast iron and riveted machine parts versus arc-welding steel

Technical Quality (sound photography, etc.): excellent

Interest and Reading Levels: intermediate, junior high, senior high

General Comments: Overall rating applies to techniques shown.

High Low
Overall Rating: 5 4 3 2 1

Title:
MAKE A HOUSE MODEL
Medium:
film
Producer:
James Love
Distributor:
Bailey Films, Inc.
(free loan)

Color—Black & White:
black & white
Length:
11 minutes
Area:
Prevocational
Subject:
Cardboard construction of scale model house

Annotation: This arts and crafts series film shows how to make a scale model house with simple materials and craft tools. It shows such skills as making a scale drawing from a blueprint, using such elementary drafting tools as the scale ruler, ruling pen, and divider; and use of the cutting and scoring knife to cut and score the scale drawing now reproduced on stiff cardboard stock. Also used are tweezers to position scaled wooden "beams" for the roof and rails for the porch. We see also the use of the paint brush in lending realism to the developing house and its landscaped features, the design techniques of which are also explained in some detail. The film suggests to the exploratory student the idea of experimentation with tools and materials of value to him in future vocational pursuits. As such the film has merit also to students of homemaking, art and architecture, as well as for the student of mechanical drawing and draftsmanship.

Major Purpose: To demonstrate one of the ways a scale model of a house can be made

Technical Quality (sound, photography, etc.): excellent

Interest and Reading Levels: junior high

High Low
Overall Rating: 5 4 3 2 1

Title:
THE MAKING OF FINE CHINA
Medium:
film
Producer:
Lenox, Inc.
Distributor:
Modern Talking Pictures
(free loan)

Color—Black & White:
color
Length:
23 minutes
Area:
Prevocational
Subject:
Fine china production

Annotation: A specialized industry is seen to be a fine blend of artistic hand craftsmanship and modern production and control techniques where beauty is fused with quality. A quick look at the raw materials of clay, felspar, and flint as they flow into the Trenton, New Jersey, plant provides background. Now, the student sees a variety of hand craftsmen plying their trades: those who make the plaster-of-Paris models, first step in making the molds from which the fine china plate will eventually come; those who make the clay batch; those who cast the clay forms; those who attach handles, etc. by hand. The student sees how modern machinery again takes over, in the form of a plate-cutting machine, in maintaining uniform quality and thickness; in the hours-long firing process; then to sand-blasting equipment. Next, back to hand skills as women are seen subjecting the pieces to rigid inspection under strong light; others hand-dipping pieces into raw glaze; still others removing glaze, as the now-glazed pieces again move on into firing, for hours at high temperatures, rigidly controlled by modern technology. Hand-tool workers apply the trademark, skilled artists demonstrate deftness of hand and eye as they decorate fired pieces with a variety of materials, with more firing after each artistic application.

Major Purpose: To show the complete background on making of fine china

Technical Quality (sound, photography, etc.): excellent; sound for hearing child is fair to satisfactory

Interest and Reading Levels: junior high

High Low
Overall Rating: 5 4 3 2 1

Title:
METAL CRAFT
Medium:
film
Producer:
Encyclopedia Britannica
Distributor:
Encyclopedia Britannica

Color—Black & White:
black & white
Length:
12 minutes
Area:
Prevocational
Subject:
Metal Craft

Annotation: This film shows the materials, tools, techniques, and skills employed by the master hand craftsman in metals.

Major Purpose: To illustrate various techniques used in metal craft

Technical Quality (sound, photography, etc.): good

Interest and Reading Levels: junior high, senior high, adult

High Low
Overall Rating: 5 4 3 2 1

Title:
METAL WORKING SERIES
Medium:
filmstrip
Producer:
McGraw Hill Text Films
Distributor:
McGraw Hill Text Films

Color—Black & White:
color
Length:
6 filmstrips
Area:
Prevocational
Subject,
Metal working

Annotation: Correlated with the text, GENERAL METALS, by John Feirer, this series includes the following titles: FORMING AND SEAMING—excellent for general shop classes as well as a review by older boys; BENCH METAL CUTTING—cutting various shapes on heavy metal stock with saw and chisel; BENCH METAL FILING—an introduction to a few of the commonly used files, their uses and proper filing techniques: BENCH METAL DRILLING—proper ways of holding stock and the correct use of sizing guages, and hand and bench drills; LAYING OUT-CUTTING—types of gauges used, layout tools and techniques and tools required, cutting techniques with hand and aviation snips and hole punches—are some of the important areas covered in this strip; ART METAL

MAKING—tray and bowl skills demonstrated include lay-out, molds and forms, forming hammers, annealing and pickling, trimming and polishing, edge decorating, doming, fluting and scalloping.

Major Purpose: To acquaint the general metal student with the basic tools and techniques of metal working

Technical Quality (sound, photography, etc.): good

Interest and Reading Levels: junior high; sixth grade, seventh grade reading level

High Low
Overall Rating: 5 4 3 2 1

Title:
OCCUPATION: AUTO MECHANIC
Medium:
film
Producer:
Modern Talking Pictures
Distributor:
Modern Talking Pictures
(free loan)

Color—Black & White:
color
Length:
13 minutes
Area:
Prevocational
Subject:
Auto Mechanic

Annotation: This film shows potential young job seekers how to get started and what opportunities exist for a boy beginning a career in the automotive field. The experiences of the youth as he interviews for and begins his new job as an auto mechanic are realistically portrayed.

Major Purpose: To interest the viewer in auto mechanics as a vocational pursuit

Technical Quality (sound, photography, etc.): excellent

Interest and Reading Levels: senior high; sixth grade reading level

High Low
Overall Rating: 5 4 3 2 1

Title:
POTTERY MAKING
Medium:
film
Producer:
Encyclopedia Britannica
Distributor:
Encyclopedia Britannica

Color—Black & White:
color
Length:
12 minutes
Area:
Prevocational
Subject:
Pottery making techniques

Annotation: Good introduction to the potter's handicraft, from working sketch through production by wheel and hand, by coil and mold and slab, to the kiln drying and firing, cooling and glazing, decorating of and decorative uses for the finished product. Four glazing methods are demonstrated.

Major Purpose: To introduce students to the potter's handicraft
Technical Quality (sound, photography, etc.): satisfactory
Interest and Reading Levels: intermediate, junior high, senior high

High Low
Overall Rating: 5 4 3 2 1

Title:
PRECISION TOOLMAKING AND MACHINING
Medium:
film
Producer:
Matt Farrell Productions, Inc.
Distributor:
Modern Talking Pictures (free loan)

Color—Black & White:
color
Length:
25 minutes
Area:
Prevocational
Subject:
Tool and die making

Annotation: In broad coverage this is the story of modern technology's dependence on the tool, die, and precision making industry. Modern manufacturing methods and mass production of duplicate parts have reduced unit costs and raised the American standard of living second to none.

This has been possible only because of the skilled know-how of the nation's tool, die, and precision-making industries. "Precision" is the tool maker's middle name, aptly symbolized by his highly complex machines. Mass production equipment requires dies of absolutely exact tolerances. Extreme accuracy must be built in and is interpreted by the millionths of an inch in some specialized precision machinery and in the area of miniaturization. The needs of modern times place extreme demands on tool and die personnel, and on the industry to develop precision workmen through apprenticeship training, a program which sets certain age, scholastic achievement, mechanical aptitude, and personal desire standards for entrance.

Some areas covered prior to receipt of the journeymans card include operation of the drill press, shaper, lathe, milling machine, cylindrical grinder; also, machine set-up, lessons in heat treating metal, in bluprint reading, elementary drawing, shop math and theory; tool design, inspection, and grinding. The apprentice learns by doing, and in this film the exploratory prevocational student is given broad exposure to the precision skills demanded of workers in the industry.

Major Purpose: To show the important role that well-trained tool and die makers play in our industrial society

Technical Quality (sound, photography, etc.): excellent; sound fair to good for hearing child

Interest and Reading Levels: junior high, senior high

High Low
Overall Rating: 5 4 3 2 1

Title:
PRINTING THROUGH THE AGES
Medium:
film
Producer:
British Ministry of Education
Distributor:
Encyclopedia Britannica

Color—Black & White:
black & white
Length:
13 minutes
Area:
Prevocational
Subject:
History of printing

Annotation: This film is a chronology of printing methods through the ages, high-lighted by Gutenberg's "breakthrough" invention of movable metal type, and the influence of the Industrial Revolution in new methods of printing and inking that made possible the rotary press which, with linotype and monotype, made newspaper and magazine production possible. Also, the film covers new methods of paper sections assembly.

Major Purpose: To introduce students to the development of printing methods

Technical Quality (sound, photography, etc.): good

Interest and Reading Levels: junior high

High Low
Overall Rating: 5 4 3 2 1

Title:
PUTTING A JOB ON A PLATTEN PRESS
Medium:
film
Producer:
A Whitten-Appleton Production
Distributor:
Bailey Films, Inc.
(free loan)

Color—Black & White:
black & white
Length:
11 minutes
Area:
Prevocational
Subject:
Platten press operation

Annotation: A complete presentation of the techniques of getting a job ready for printing on the platten press is demonstrated by this film. Some of the areas covered are: how to ink, how to put a form into a press, necessary precautions with grippers, packing sheet insertion. Also covered: need for the draw sheet, use of guidelines, pulling the guide proof and additional proofs, including all necessary checks and compensations for misalignment.

Major Purpose: To acquaint the student with the steps involved in setting up a job on a platten press

Technical Quality (sound, photography, etc.): poor to fair quality photography; sound satisfactory

Interest and Reading Levels: junior high
General Comments: A teacher's guide is included.

High Low
Overall Rating: 5 4 3 2 1

Title:
SHOP PROCEDURES: MECHANICAL DRAWING
Medium:
film
Producer:
Pathescope Productions
Distributor:
McGraw Hill Book Co.

Color—Black & White:
black & white
Length:
17 minutes
Area:
Prevocational
Subject:
Mechanical drawing

Annotation: Mechanical drawing as a "picture language" is emphasized throughout. Not only must the draftsman's drawings give workmen full specifications for production, but also they should reflect the draftsman's knowledge of the "flow" his blueprints make through the various factory departments. The film illustrates, under actual shop conditions, the many machine tools that produce the components of such machinery as milling machines, shapers, grinders, etc.—with all of which the student draftsman needs to become familiar to best appreciate the importance of his trade as a "picture language"—from machine shop through final assembly.
Major Purpose: To demonstrate to students that mechanical drawing is a picture language
Technical Quality (sound, photography, etc.): excellent, but some sound fades out
Interest and Reading Levels: junior high, senior high, adult

High Low
Overall Rating: 5 4 3 2 1

Title:
THE STORY OF BALL MANUFACTURING
Medium:
film
Producer:
Robert M. Carson
Distributor:
Ball Mfg. Co.

Color—Black & White:
color
Length:
24 minutes
Area:
Prevocational
Subject:
Glass manufacturing

Annotation: This film presents a broad coverage of glass container manufacturing from raw materials to distribution of finished product. Quality control is stressed throughout all operational phases. The film also shows Ball's maintenance of independent industries to satisfy their demands for metal and paper container products, as well as their demands to satisfy a broad training program to create direct and related skills necessary to their existence.

Major Purpose: To introduce students to manufacturing processes of glass containers

Technical Quality (sound, photography, etc.): technical quality good; narration fast

Interest and Reading Levels: intermediate, junior high

High Low
Overall Rating: 5 4 3 2 1

Title: THE STORY OF THE BUILDING OF A HOUSE	**Color—Black & White:** color
Medium: filmstrip	**Length:** 9 filmstrips
Producer: Eye Gate House, Inc.	**Area:** Prevocational
Distributor: Eye Gate House, Inc.	**Subject:** Home building trades

Annotation: The series presents a comprehensive sampling of the specialized building trades skills needed in the construction of a modern American home. Covered are such steps as the total process of land acquisition and clearing, architectural planning, contractor's role, laying of the foundation, construction and finishing of the house. Seen are many workmen, plying such skilled trades as: masonry, bricklaying, carpentry, joinery, plumbing, heating, wiring, lathing, insulating, plastering, roofing, wall-papering, tinsmithing, tiling, gas-fitting, floor finishing, glazing, steelwork and others.

Major Purpose: To introduce viewers to the building trades employed in the home construction industry.

Technical Quality (sound, photography, etc.): excellent

Interest and Reading Levels: intermediate

High Low
Overall Rating: 5 4 3 2 1

Title: THE TECHNIQUES OF MODERN FLUID DUPLICATING PART I—THE MASTER	**Color—Black & White:** color
Medium: filmstrip and record	**Length:** 122 frames
Producer: A B Dick Co.	**Area:** Prevocational
Distributor: A B Dick Co. (free loan)	**Subject:** Office Practice

Annotation: This filmstrip demonstrates the step-by-step method of preparing masters for a fluid duplicating machine. It also displays the correct method of making erasures and illustrates the varied uses which can be made of duplicated materials.

Major Purpose: To learn how to make masters for a fluid process duplicator

Technical Quality (sound, photography, etc.): excellent

Interest and Reading Levels: junior high

General Comments: This is an excellent presentation to be used when teaching the duplicating process.

High Low
Overall Rating: 5 4 3 2 1

Title:
TECHNOLOGY WITH ART
Medium:
film
Producer:
Cinematographic Productions
Distributor:
Browning Arms Co.
(free loan)

Color—Black & White:
color
Length:
30 minutes
Area:
Prevocational
Subject:
Gun making artistry

Annotation: Produced by the Browning gun concern, this film is unique in that it beautifully illustrates both traditional hand tools and modern machine operations in the manufacture of a single product, the Browning automatic shotgun. The company feels that traditional handicraft skills should be retained when they produce superior results. Though not depicted, except in part, some 650 separate machine operations are undertaken in making this precision weapon. Throughout the prevocational student can see the traditional skills of the barrel bender; of the stock fitter and finisher's use of hand chisels, gouges, files, and sandpaper; he can see the artistry of the checker in cross checking the stock (a 5-hour undertaking even by a master craftsman); he can see hand polishing of metal parts. From manufacture to final assembly to the firing tests that finish the job, the prevocational student is exposed by this film to a wide variety of hand and machine skills in gun-making technology.

Major Purpose: To become familiar with hand and machine skills in gun-making technology

Technical Quality (sound, photography, etc.): good

Interest and Reading Levels: junior high

High Low
Overall Rating: 5 4 3 2 1

Title:
WELDING FUNDAMENTALS
FOR THE WELDING STUDENT

Color—Black & White:
color

Medium:
slides
Producer:
Hobart Brothers Company
Distributor:
Hobart Brothers Company
(free loan)

Length:
12 slides
Area:
Prevocational
Subject:
Welding

Annotation: Multiple colors (orange, yellow, green, white) used on each slide enhance understanding of concepts as indicated by the following subject headings:

- Types of welds
- Common terms applied to welds
- Types of joints
- Variations of groove
- Groove a plate
- Groove weld pipe
- Fillet weld
- Electrode coating
- Horizontal position: basic motions
- Vertical position: basic motions
- Overhead position: basic motions
- 5 essentials for proper welding procedure

Major Purpose: To familiarize the maturing prevocational student with the nomenclature, materials, and skills employed by the professional welder in industry
Technical Quality (sound, photography, etc.): excellent use of multiple color photography
Interest and Reading Levels: junior high
General Comments: Though already captioned at about the sixth grade reading level, the series is excellent for general exposure for the prevocational student.
High Low
Overall Rating: 5 4 3 2 1

Title:
WOODWORKING
Medium:
film
Producer:
Encyclopedia Britannica
Distributor:
Encyclopedia Britannica

Color—Black & White:
black & white
Length:
10 minutes
Area:
Prevocational
Subject:
Woodworking

Annotation: This film illustrates the basic woodworking hand tools, lathes and woods that will be encountered and employed by the beginning woodworking student.
Major Purpose: To introduce basic woodworking hand tools
Technical Quality (sound, photography, etc.): good
Interest and Reading Levels: intermediate
General Comments: Is a good orientation film. It would be enhanced by color.
High Low
Overall Rating: 5 4 3 2 1

Title:
WOODWORKING SERIES
Medium:
filmstrip
Producer:
McGraw Hill Book Co.
Distributor:
McGraw Hill Book Co.

Color—Black & White:
color
Length:
6 filmstrips
Area:
Prevocational
Subject
Hardwoods, wood design and shop safety

Annotation: Of the six filmstrips in the series, two have direct and practical use in the general prevocational program. SAFETY IN THE SHOP covers shop safety objectives, preparation for work, pupil work stations, care and use of hand tools and machines, shop hazards, first aid and techniques in lifting heavy objects. The filmstrip includes a summary stressing salient points. HARDWOOD LUMBERING shows properties, application, and uses of hardwood in sports and industry. It describes bark, leaves, and grain of eight important hardwoods.

Major Purpose: To promote personal and group safety practices in the shop and acquaint students with features of and uses for a group of important hardwoods

Technical Quality (sound, photography, etc.): good

Interest and Reading Levels: intermediate, junior high

High Low
Overall Rating: 5 4 3 2 1

Title:
WOODWORKING TOOLS AND MACHINES
Medium:
filmstrip
Producer:
Jam Handy Organization
Distributor:
Jam Handy Organization

Color—Black & White:
black & white
Length:
14 filmstrips
Area:
Prevocational
Subject:
Safety in woodworking tools and machine shop

Annotation: The series enhances the instructional program for each of the several woodworking machines or tools included. It would be especially valuable for vocational shops, as a series; however, for the prevocational exploratory program, suitable strips are as follows:

66 frames: HAND TOOLS (hammers, saws)
77 frames: PLANES, BITS, KNIVES, CHISELS, SCREW DRIVERS, FILES
93 frames: JIG SAW
88 frames: BAND SAW

Major Purpose: To demonstrate correct techniques in using basic hand and machine tools

Technical Quality (sound, photography, etc.): excellent

Interest and Reading Levels: intermediate, junior high, senior high

General Comments: The "5" rating covers above-named strips only.

High Low
Overall Rating: 5 4 3 2 1

Title: THE WORK OF SIMPLE MACHINES	**Color—Black & White:** color
Medium: sound filmstrip	**Length:** 5 filmstrips (47-54 frames)
Producer: Society for Visual Education, Inc.	**Area:** Prevocational
Distributor: Society for Visual Education, Inc.	**Subject:** Principles of basic machines

Annotation:

THE WORK OF THE WHEEL AND AXLE Discusses the wheel-and-axle and the work that it does; shows how a wheel and axle gives us a mechanical advantage of force; gives examples of wheel-and-axle machines and shows how we can gain speed or distance with a wheel-and-axle.

THE WORK OF THE LEVER Shows how a simple bar or rod is a machine; defines work and fulcrum; shows the difference between 1st., 2nd., & 3rd. class levers; shows what is meant by effort and resistance distance, and shows how work done by a lever can be measured.

THE WORK OF THE PULLEY Discusses the fixed pulley and the work that it does; shows how some pulleys can help us gain a mechanical advantage; describes the function of a single movable pulley; and shows the construction and mechanical advantage of a block and tackle.

THE WORK OF THE INCLINED PLANE, SCREW, AND WEDGE Defines force and work; tells about the inclined plane; shows how a wedge is a kind of inclined plane; explains a screw.

THE WORK OF GEARS Shows how power can be transferred by chains and belt and how gears can change direction of motion; explains how gears may help gain a mechanical advantage of force; shows how to find the amount of mechanical advantage in a set of gears.

Major Purpose: To acquaint pupil with the six basic simple machines and to show how they help us perform our daily work with less force or effort. Also, to define the concept of mechanical advantage, and to show how gears can change the direction of motion or give an advantage of speed or force

Technical Quality (sound, photography, etc.): excellent; recording satisfactory for hard of hearing pupil

Interest and Reading Levels: intermediate, junior high

General Comments: The filmstrips are single concept structured; titled records are banded to allow teacher to select any concept segment to fit lesson plan; can also be used for review purposes. The series has an excellent teacher's guide and reading script for the records.

High Low
Overall Rating: 5 4 3 2 1

ANNOTATED EDUCATIONAL MEDIA

General Prevocational Education:
Home Economics

Title:
BRINGING HOME THE BACON
Medium:
film
Producer:
Oscar Mayer
Distributor:
Modern Talking Pictures
(free loan)

Color—Black & White:
color
Length:
22 minutes
Area:
Prevocational
Subject:
Sausage production

Annotation: This film gives broad coverage to the production, seasoning, banding, labeling, packaging, and shipping of sausage in various forms. Throughout, quality control is stressed, with inspection and grading resulting in electronic records being utilized in relaying quality control data to livestock procedures servicing the company. On the production line, the prevocational student can see the stuffing, smoking, and cooking of weiner sausage; the half dozen seasons utilized; the banding and labeling operations. He can also see the vacuum sealing of salami in order to preserve its freshness and flavor. Hand-wrapping and packaging, and cooler storage prior to shipment are other areas briefly explored.

Major Purpose: To acquaint the student with the sausage production industry

Technical Quality (sound, photography, etc.): excellent; sound good for hard of hearing

Interest and Reading Levels: intermediate, junior high

General Comments: The committee feels that the first 12 minutes of narration in this film negates its usefulness in the exploratory area of prevocational education. Our "5" evaluation is based only on the final 10 minutes, the only part of usable value in prevocational education or in advanced home economics courses.

High Low
Overall Rating: 5 4 3 2 1

Title:
THE COOKING SERIES
Medium:
filmstrip
Producer:
McGraw Hill Book Co.
Distributor:
McGraw Hill Book Co.

Color—Black & White:
black & white
Length:
8 filmstrips
Area:
Prevocational
Subject:
Foods

Annotation: Series filmstrip titles are as follows:
UNDERSTANDING COOKING TERMS
BUYING FOOD WISELY
SAFETY IN THE KITCHEN
ORGANIZING AND PREPARING MEALS

PLANNING MEALS FOR NUTRITION
STORING FOODS
MEASURING ACCURATELY
SERVING MEALS ATTRACTIVELY

Major Purpose: To acquaint the female prevocational student with good home kitchen management techniques

Technical Quality (sound, photography, etc.): fair to good

Interest and Reading Levels: junior high

General Comments: The series needs to be updated.

High Low
Overall Rating: 5 4 3 2 1

Title:
14 ACRES OF KITCHEN

Medium:
film

Producer:
Wilding

Distributor:
Libby McNeill and Libby
(free loan)

Color—Black & White:
color

Length:
12 minutes

Area:
Prevocational

Subject:
Canned Foods

Annotation: The prevocational student follows the automated production route taken by lean beef that is destined to become beef stew, as processed by this company. Libby's prepares its own cans, also, and the student first sees the sheet steel cut, punched, printed, curled, formed into cans (600 per minute), and tested for proper seal. Conveyed automatically to the kitchens, the lean chunk beef is next cooked within the cans, then tested by machine for such items as moisture, quality, quantity and, of course, taste, for which no technology can substitute for human discriminatory powers. Next, automatically, the cans are cooled, labeled, sorted, and packaged (19 different products in all). The mobile equipment which lifts the stacks of packed carton containers onto trucks does so by pressure on the sides of the container stacks, lifting them bodily without the need for the familiar pallet underneath. Throughout this film the exploratory student is constantly impressed with how efficiently automation increases productivity and lowers costs.

Major Purpose: To present a comprehensive picture of the vegetable processing industry

Technical Quality (sound, photography, etc.): excellent; sound is fair to good for hearing child

Interest and Reading Levels: intermediate, junior high

High Low
Overall Rating: 5 4 3 2 1

Title:
FROZEN FOODS
Medium:
film
Producer:
Bailey Films
Distributor:
Bailey Films
(free loan)
Color—Black & White:
color
Length:
11 minutes
Area:
Prevocational
Subject:
Frozen foods

Annotation: The frozen food industry is explored generally, from truck garden to freezing to packaging to distribution. The prevocational deaf student will be exposed to suitable employment opportunities in typical fool processing plants. A teacher's guide accompanies this film.
Major Purpose: To introduce students to the frozen food industry
Technical Quality (sound, photography, etc.): good
Interest and Reading Levels: junior high, senior high
High Low
Overall Rating: 5 4 3 2 1

Title:
GIVE YOUR EGGS A BREAK
Medium:
film
Producer:
National Educational Media, Inc.
Distributor:
Modern Talking Pictures
(free loan)
Color—Black & White:
color
Length:
10 minutes
Area:
Prevocational
Subject:
Egg preparation

Annotation: This film includes a "Contrived situation" coverage in a semi-humorous vein of proper preparation in a restaurant setting of a variety of egg dishes, among them the omelette and fried, poached, boiled, and shirred eggs. A number of "experience" tips as well as techniques are narrated as seen. A bonus is a brief treatment on the subject of egg storage and detection of egg freshness.
Major Purpose: To illustrate proper and acceptable techniques for preparing eggs for restaurant customers
Technical Quality (sound, photography, etc.): excellent
Interest and Reading Levels: junior high
High Low
Overall Rating: 5 4 3 2 1

Title:
KITCHEN SAFETY
Medium:
film
Producer:
National Education Media, Inc.
Color—Black & White:
color
Length:
10 minutes
Area:
Prevocational

Distributor:
Modern Talking Pictures
(free loan)

Subject:
Kitchen accident
areas

Annotation: The film's theme, "Safety Is Everybody's Job," is action-illustrated in the three areas of a commercial restaurant (or one's home, for that matter), where falls are most frequent: on floors, stairways, and in climbing.

Common sense suggestions for working in safety in each of these danger areas are presented, first by "setting up" typical falling accidents, then by showing the detailed steps that should be taken to avoid same.

Major Purpose: To make viewer aware of accident prone areas and to give viewers suggestions to prevent accidents

Technical Quality (sound, photography, etc.): excellent

Interest and Reading Levels: junior high, senior high

High Low
Overall Rating: 5 4 3 2 1

Title:
MR. BUSBOY

Medium:
film

Producer:
National Educational Media

Distributor:
Modern Learning Aids

Color—Black & White:
color

Length:
10 minutes

Area:
Prevocational

Subject:
Foods

Annotation: This film presents the importance of a busboy's job in the food service industry. The points stressed are neatness, service duties, proper dish stacking and attentiveness to the guests' needs. Also stressed is the importance of getting along with the public and co-workers. This is a talent and is important for a good busboy.

Major Purpose: To show the responsibilities and duties of a good busboy

Technical Quality (sound, photography, etc.): very good

Interest and Reading Levels: junior high

General Comments: This is a very good film.

High Low
Overall Rating: 5 4 3 2 1

Title:
A PUBLIC WELL-SERVED

Medium:
film

Producer:
Paper Cup and Container Institute,
Inc.

Color—Black & White:
color

Length:
10 minutes

Area:
Prevocational

Distributor:
Paper Cup and Container Institute, Inc. (free loan)

Subject:
Sanitation in food service industry

Annotation: This film shows actual food service personnel working in a variety of "live" food-service situations calling for good sanitation practices. It can be well used as a training tool, as a point of reference or basis for subsequent and more complete classroom and/or on-premise demonstration by the teacher.

Major Purpose: To acquaint the viewer with the importance of sanitation in the food service industry

Technical Quality (sound, photography, etc.): excellent; sound fair to good for hearing child

Interest and Reading Levels: junior high, senior high

High Low
Overall Rating: 5 4 3 2 1

Title:
THE WONDERFUL WORLD OF BEEF

Color—Black & White:
color

Medium:
film

Length:
23 minutes

Producer:
Douglas Film Industries

Area:
Prevocational

Distributor:
Modern Talking Pictures (free loan)

Subject:
Meat processing

Annotation: From feeding range to retail store is the area covered by this complete presentation of the beef cattle industry. Scientific feeding techniques on Colorado ranches are analyzed by Chicago laboratories for quality control. Experienced cattle buyers analyze and demonstrate their selective skills. From packing plant to grading to trimming, where the carcass loses one-fourth of its original weight, other individual know-how and techniques are illustrated in detail. Refrigerated shipping operations are seen next. The six-day journey to the nations stores provides natural aging time. The second main section deals with the processing of the refrigerated-aged-trimmed-graded carcass in the retail store setting. Here it is reweighed and the essential cutting operations are begun.

Major Purpose: Complete presentation of the beef cattle industry

Technical Quality (sound, photography, etc.): excellent; good sound for hearing child

Interest and Reading Levels: junior high, senior high

High Low
Overall Rating: 5 4 3 2 1

Title:
ATTITUDES AND OCCUPATIONS (second edition)

Color—Black & White:
color

Medium:
film

Length:
16 minutes

Producer:
Coronet

Area:
Prevocational

Distributor:
Coronet

Subject:
Guidance and Testing

Annotation: A school counselor and a group of senior high school pupils examine the use of tests to help point up their occupational interests, talents, and achievement. The basic group of aptitudes and interests are fully illustrated in scenes detailing a variety of occupational categories. Individual counseling and consideration of scholastic records and extracurricular activities are stressed as necessary adjuncts of testing.

Major Purpose: To stress the importance of the role that interest, achievement, and aptitude tests should play in trying to choose one's occupations

Technical Quality (sound, photography, etc.): excellent

Interest and Reading Levels: junior high

High Low
Overall Rating: 5 4 3 2 1

Title:
BEGINNING RESPONSIBILITIES: RULES AT SCHOOL

Color—Black & White:
color

Medium:
film

Length:
11 minutes

Producer:
Coronet

Area:
Prevocational

Distributor:
Coronet

Subject:
Guidance

Annotation: This film depicts important school rules about being on time, about putting things away, about quietness and safety on the playground. The film shows a class making its own set of rules for a visit to a museum. The class learns how rules are made by the people who use them for their own good. Then the class makes an interesting and pleasant trip to the museum, because they follow the rules and make them work.

Major Purpose: To demonstrate who makes the rules and why

Technical Quality (sound, photography, etc.): excellent

Interest and Reading Levels: primary, intermediate

General Comments: This film is highly recommended.

High Low
Overall Rating: 5 4 3 2 1

Title:
EVERYDAY COURTESY
(second edition)
Medium:
film
Producer:
Coronet
Distributor:
Coronet

Color—Black & White:
color
Length:
11 minutes
Area:
Prevocational
Subject:
Courtesy

Annotation: In a talk before his class, young Jeff defines courtesy as being considerate of other people. This includes situations involving both speaking and listening. Through Jeff and his school friends, the film presents actual situations through which the young prevocational student, searching for values, can learn the courteous forms of introduction, extending and accepting oral and written invitations, showing respect for one's elders, and other social acts that make human relationships easier and more pleasant for everyone.

Major Purpose: To illustrate the use of courteous behavior in everday situations.

Technical Quality (sound, photography, etc.): excellent

Interest and Reading Levels: intermediate

General Comments: This is an excellent, up-to-date film.

High Low
Overall Rating: 5 4 3 2 1

Title:
FATHERS GO AWAY TO WORK
Medium:
film
Producer:
Bailey Films
Distributor:
Bailey Films

Color—Black & White:
color
Length:
11 minutes
Area:
Prevocational
Subject:
Occupations

Annotation: Three young children play their fathers' working roles, each of which is portrayed in turn and followed by live-action scenes of the father's work day. Seen first is David's father at work as a driver of an earth-moving machine on a road construction project, with the sounds of the heavy equipment included. Next, is seen Ruth's father at work as an inside salesman for a chinaware factory. In the course of his work day he reads and dictates letters, uses a dictaphone, makes phone calls and plans sales campaigns. Patricia's father is an artist whose drawings appear on publications seen by many people. The film concludes with a summary, and is especially good for primary level children, many of whom have no idea of what their fathers do at work.

Major Purpose: To foster understanding among very young school children of the adult world of work

Technical Quality (sound, photography, etc.): excellent

Interest and Reading Levels: primary, intermediate

High Low
Overall Rating: 5 4 3 2 1

Title:
HOW TO KEEP A JOB
Medium:
film
Producer:
Coronet
Distributor:
Coronet

Color—Black & White:
black & white
Length:
10 minutes
Area:
Prevocational
Subject:
Holding a job

Annotation: Correct work attitudes and habits are as important to job success as is the choice of one's occupation. The film portrays this concept in a story-type treatment of real-life interest to high school-age students, and stresses such attitudes as dependability, cooperation, willingness to work, loyalty, and initiative.

Major Purpose: To develop an appreciation of proper work attitudes and habits

Technical Quality (sound, photography, etc.): good; sound only for hearing child

Interest and Reading Levels: junior high, senior high

High Low
Overall Rating: 5 4 3 2 1

Title:
KNOWING'S NOT ENOUGH
Medium:
film
Producer:
U. S. Steel
Distributor:
Modern Talking Pictures

Color—Black & White:
color
Length:
25 minutes
Area:
Prevocational
Subject:
Safety

Annotation: This film describes the importance of safety on the job. It stresses the danger of carelessness, indifference and lack of preparation. There are four basic characteristics in human behavior which can cause serious accidents. Listed they are impulsiveness, impatience, impunity (accidents always happen to the other fellow), and improvising. All of these are graphically illustrated.

Major Purpose: To explain the importance of safety.

Technical Quality (sound, photography, etc.): good

Interest and Reading Levels: junior high, senior high, adult

General Comments: This is a good film on safety.

High Low
Overall Rating: 5 4 3 2 1

Title:
POPULARITY PROBLEMS OF OLDER TEENS
Medium:
filmstrips and records
Producer:
Society for Visual Education, Inc.
Distributor:
Society for Visual Education, Inc.

Color—Black & White:
color
Length:
4 filmstrips
Area:
Prevocational
Subject:
Guidance

Annotation: LEARNING ABOUT LOYALTY, WAYS WE INFLUENCE OTHERS, SOME FACTS ABOUT SMOKING AND DRINKING, and BELONGING TO A CROWD, have been designed to be used with 15, 16, and 17-year-olds to enrich and supplement study units and discussion programs in the area of status, popularity, and group relationships in school guidance programs.

Major Purpose: To show the importance of loyalty; to show that individuals influence others; to show the effects of tobacco and alcohol on the human body; to show the advantages and disadvantages of belonging to various kinds of crowds.

Technical Quality (sound, photography, etc.): very good

Interest and Reading Levels: senior high

General Comments: Should be shown as a guidance vehicle to help the teenagers avoid some of the dangers he will encounter in striving to be popular.

High Low
Overall Rating: 5 4 3 2 1

Title:
POPULARITY PROBLEMS OF YOUNG TEENS
Medium:
filmstrips and records
Producer:
Society for Visual Education, Inc.
Distributor:
Society for Visual Education, Inc.

Color—Black & White:
color
Length:
4 filmstrips
(42-[illegible]3 frames)
Area:
Prevocational
Subject:
Guidance

Annotation: MAKING THE MOST OF YOURSELF, THE SMOKING PROBLEM, HOW TO MAKE AND KEEP FRIENDS, LEARNING ABOUT POPULARITY, have been designed to use with 12, 13, and 14 year olds to enrich and supplement study units and discussion programs in the area of status, popularity, and peer relationships in school guidance programs.

Major Purpose: To show young teenagers how to overcome feelings of embarrassment and inferiority; make intelligent decisions about tobacco and alcohol; make and keep friends; and achieve popularity in desirable ways

Technical Quality (sound, photography, etc.): very good
Interest and Reading Levels: junior high
General Comments: Should be used as a guidance vehicle to develop wholesome personalities; develop good friends, and enable the teenagers to make an intelligent decision on the use of tobacco.

High Low
Overall Rating: 5 4 3 2 1

Title:
THE ROAD AHEAD
Medium:
film
Producer:
Urban League
Distributor:
Association Films

Color—Black & White:
black & white
Length:
20 minutes
Area:
Prevocational
Subject:
Vocational Attitudes

Annotation: A series of events that occur in the lives of two young men are shown when they have been released from employment due to automation. A good comparison is made throughout the film of attitudes: do it now/ afterwhile, concern/lack of concern, high school diploma/drop out, willingness to begin at the bottom/being too good for the fob offered, willingness to accept help and suggestions/rejection of aid.
Major Purpose: To show the importance of staying in school and how a high school diploma, hard work, self determination and improvement may lead to success
Technical Quality (sound, photography, etc.): very good
Interest and Reading Levels: junior high, senior high, adult; 4-6 grade reading level
General Comments: This is an excellent film.

High Low
Overall Rating: 5 4 3 2 1

Title:
YOU AND YOUR WORK
Medium:
film
Producer:
Coronet
Distributor:
Coronet

Color—Black & White:
black & white
Length:
12 minutes
Area:
Prevocational
Subject:
Job satisfaction

Annotation: A high school boy locates but soon loses interest in his new job as a shoe salesman. He fails to find satisfaction or take pride in his work, irritates the customers, grumbles at his low beginning pay, is late to work, and is fired. His school counselor helps Frank look at work with satisfaction by searching for and finding interest in his job.

He helps Frank look at work as not "just a job", a concept that is made clear to the prevocational pupil by portrayal of young people at work in various types of jobs. This film treats the problems of one's attitude toward work in general.

Major Purpose: To develop positive work attitudes
Technical Quality (sound, photography, etc.): average
Interest and Reading Levels: junior high
High Low
Overall Rating: 5 4 3 2 1

SOURCES FOR MEDIA

98/99

Names and addresses of sources from which materials in this Report may be obtained (Requests should be directed to the Distributor unless otherwise indicated)

A B Dick Co., Inc.
4323 East River Drive
Philadelphia, Pa. 19129

American Academy of Pediatrics
1801 Hinman Avenue
Evanston, Illinois 60204

American Bottlers of Carbonated Beverages
1128 Sixteenth Street, N. W.
Washington, D.C. 20036

American Cyanamid Company
Fibers Division
111 W. 40th St.
New York, New York 10018

American Forest Products Industries, Inc.
1835 K Street, N. W.
Washington, D. C. 20236

American Gas Association
420 Lexington Avenue
New York, New York 10017

American Institute of Timber Construction
1757 K Street, N. W.
Washington, D. C. 20206

American Iron and Steel Institute
150 East Forty-second Street
New York, New York 10017

American Lamb Council
Consumer Sales Dept.
520 Railway Exchange Building
Denver, Colorado 80202

American Meat Institute
400 East Ontario Street
Chicago, Illinois 60611

American Paper & Pulp Assoc.
122 E. 42nd Street
New York, New York 10017

American Technical Society
Chicago, Illinois 60637

Addressograph-Multigraph Corp.
Cleveland, Ohio 44117

Agriculture Research Service
U.S. Department of Agriculture
Washington, D. C. 20250

Association Films, Inc.
324 Delaware Avenue
Oakmont, Pa. 15139

Audio-Visual Div.
Popular Science Publishing Co., Inc.
355 Lexington Ave.
New York, N. Y. 10017

Audio Visual School Service
386 Fourth Ave.
New York, New York 10016

The Babcock & Wilcox Co.
Director, Advertising and Public Relations
161 East 42nd Street
New York, New York 10017

Bailey Films, Inc.
6509 DeLongpre Ave.
Hollywood, Calif. 90028

Ball State University Film Service
Ball State University
Muncie, Indiana 47306

Bethlehem Steel Corp.
Industrial and Public Relations Dept.
Bethlehem, Pa.

Betty Crocker Film Library
General Mills Inc.
9200 Waysata Blvd.
Minneapolis, Minnesota 55440

Bowaters Southern Paper Corp.
Calhoun, Tennessee 37309

Brandon
200 West 57th Street
New York, New York 10017

Browning Arms Co.
1706 Washington Ave.
St. Louis, Mo. 63103

The Bruce Publishing Co.
704 Bruce Building
Milwaukee, Wisconsin 53201

C and H Sugar Kitchen
P.O. Box 3669
San Francisco, California 94119

Carnation Milk
Home Service Director
Los Angeles, California 900

Cereal Institute, Inc.
135 S. La Salle Street
Chicago, Illinois 60603

Chas. A. Bennett Co., Inc.
809 W. Detweiller Drive
Peoria, Illinois 61614

Chronicle Guidance Publications, Inc.
Moravia, New York 13118

Churchill Films
662 North Robertson Boulevard
Los Angeles, Calif. 90060

Colonial Films, Inc.
70 Fairlie Street, N.W.
Atlanta, Georgia 30303

The Colorado Fuel and Iron Corp.
Publicity Dept.
P. O. Box 316
Pueblo, Colorado 81002

Commercial Food Service Department
Farley Manning Associates, Inc.
342 Madison Ave.
New York, New York 10017

Consumers Institute
General Electric Co. Appliance Park
Louisville, Kentucky 40225

Coronet Films
Chicago, Ill. 60601

Creative Visuals, Inc.
Box 310
Big Springs, Texas 79720

Curriculum Materials Corp.
1319 Vine Street
Philadelphia, Pa. 19107

DCA Educational Products, Inc.
4865 Stenton Avenue
Philadelphia, Pa. 19144

Department of Institution Management
Syracuse University
Syracuse, New York 13210

The Diversey Corporation
212 West Monroe Street
Chicago, Illinois 60606

Don Bosco Films
New Rochelle, New York 10802

DuArt Film Lab., Inc.
U.S. Government Film Services
245 W. 55th Street
New York, N. Y. 10019

Eastman Kodak Co.
Rochester, New York 14650

Economics Laboratory, Inc.
Guardian Building
St. Paul, Minnesota 55101

Educational Department
Coty Inc.
423 W. 55th Street
New York, New York 10019

Encyclopedia Britannica Films
1150 Wilmette Avenue
Wilmette, Illinois 60091

Entelek, Inc.
42 Pleasant Street
Newburyport, Mass. 09150

Evaporated Milk Association
228 North La Salle Street
Chicago, Illinois 60601

Eye Gate House, Inc.
146-01 Archer Avenue
Jamaica, New York 11435

Fine Hardwoods Assoc.
666 N. Lake Shore Drive
Chicago, Illinois 60611

Fish and Wildlife Service
Department of the Interior
Washington, D. C. 20225

Follett Publishing Co.
1010 W. Washington Blvd.
Chicago, Ill. 60607

Ford Motor Co.
Educational Affairs Dept.
The American Road
Dearborn, Michigan

Friden, Inc.
San Leandro, California

Frozen Potato Products Institute
333 North Michigan Avenue
Chicago, Illinois 60601

General Electric Co.
Home Economics Dept.
1285 Boston Ave.
Bridgeport, Conn. 06602

General Foods Corp.
10 Columbus Circle
New York, New York 10019

General Motors Corp.
Public Relations Staff—Film Library
General Motors Building
Detroit, Michigan 48202

Government Film Department
United World Films, Inc.
1445 Park Avenue
New York, New York 10029

H. J. Heinz Co.
Pittsburgh, Penna.

Hammermill Paper Co.
Erie, Pa.

Hardwood Plywood Institute
P. O. Box 6246
Arlington, Virginia 22206

Home Service Department
Carnation Company
Los Angeles, California

Linda Marshall
Home Service Department
The Maytag Company
Newton, Iowa 50208

Household Finance Corp.
Money Management Institute
Prudential Plaza
Chicago, Illinois 60601

Howard W. Sams & Co., Inc.
4300 West 62nd Street
Indianapolis, Indiana 46268

IBM Corporation
Seven Penn Center
Philadelphia, Pa. 19103

Industrial Forestry Assoc.
1410 S.W. Morrison Street
Portland, Oregon 97225

Institutional Products Division
General Foods Corporation
250 North Street
White Plains, New York 10605

The Jam Handy Organization
2821 East Grand Boulevard
Detroit, Michigan 48211

Jones and Laughlin Steel Corp.
3 Gateway Center
Pittsburgh, Pa. 15230

Kraft Foods
P. O. Box 986
Dayton, Ohio 45401

Kroehler Mfg. Co.
666 Lake Shore Drive
Chicago, Illinois 60611

The L. S. Starrett Co.
Athol, Massachusetts 01331

Lawry's Foods, Inc.
Box 2572, Terminal Annex
Los Angeles, California 90054

Lenox, Inc.
Prince and Meade Streets
Dept. B-3
Trenton, New Jersey 08605

Lone Star Steel Company
P. O. Box 12226
Dallas, Texas 75200

MacMillan, Bloedel and Powell River Ltd.
1199 W. Pender Street
Vancouver 1, Canada

Market Forge Company
35 Garvey Street
Everett, Mass. 02149

McBee Systems
Practical Methods Center
Dept. 12-4-2
Athens, Ohio 45701

McCall Corporation
Dept. SS
Dayton, Ohio 45401

McCormick-Mathers Publishing Co.
Wichita, Kansas 67201

McGraw-Hill Book Co.
Text-Film Div.
330 West 42nd Street
New York, N. Y. 10036

Mr. Frank Hufford
Modern Hearing Aids
927 Nineteenth Street N.W.
Washington, D.C. 20006

Modern Learning Aids
3 East 54th Street
New York, New York 10022

Modern Talking Picture Service
1212 Avenue of the Americas
New York, New York 10036

Money Management Institute
Household Finance Corp.
Prudential Plaza
Chicago, Illinois 60601

National School Service Bureau
National Blank Book Company
Holyoke, Massachusetts 01040

The National Committee for Education
in Family Finance
488 Madison Avenue
New York, New York 10022

National Forest Products Assoc.
1619 Massachusetts Ave., N.W.
Washington, D.C. 20036

National Live Stock and Meat Board
36 South Wabash Ave.
Chicago, Illinois 60603

National Restaurant Association
1530 North Lake Shore Drive
Chicago, Illinois 60610

National Secretaries Association
1103 Grand Avenue
Kansas City, Missouri 64106

Newsweek, Dept. CG
444 Madison Avenue
New York, New York 10022

Office of Education
Department of Health, Education & Welfare
Washington, D. C. 20202

The Ohio State University
Film Distribution Center
Motion Picture Division
1885 Neil Avenue
Columbus, Ohio 43210

Oxford Filing Supply Co., Inc.
Clinton Road
Garden City, New York 11533

Pellon Corporation
1120 Avenue of the Americas
New York, New York 10036

Pillsbury
Educational Department
Minneapolis, Minnesota 55402

Pineapple Growers Association
215 Market Street
San Francisco, California 94105

Proctor and Gamble Advertising
Service Building
2150 Sunnybrook Drive
Cincinnati, Ohio 45237

James W. Walker
Publications Distributions, Office of
Education
400 Maryland Ave.
Washington, D.C. 20202

Remington Rand
Division of Sperry Rand Corp.
1290 Avenue of the Americas
New York, New York 10019

Reynolds Metals Co.
Home Economics Division
Richmond, Virginia

Safety Consultation Training Services
P. O. Box 7306
Washington, D. C. 20044

Sara Lee
Consolidated Foods Corp.
Chicago, Illinois

Sears, Roebuck and Co.
Consumer Education Division 703
Chicago, Illinois 60607

Sheldon Machine Co., Inc.
4258 North Knox Avenue
Chicago, Illinois 60641

Society for Visual Education
1345 Diversey Parkway
Chicago, Illinois 60614

Stanley Bowmar Co., Inc.
12 Cleveland Street
Valhalla, New York 10595

Sterling Movies U.S.A.
43 West 61st Street
New York, New York 10022

Sterling Silversmiths of America
551 Fifth Avenue
New York, New York 10017

Sunkist Growers
Consumer Service and Nutrition Research
Box 2706, Terminal Annex
Los Angeles, California 90054

Swift and Company
Home Service Department
Chicago, Illinois 60609

Swift and Co.
Refinery Dept.
Union Stock Yards
Chicago, Illinois

Teachers Practical Press, Inc.
47 Frank Street
Valley Stream, Long Island, New York 11580

Technifax Corp.
Holyoke, Mass. 01040

Tescom Corp.
27th Avenue and 4th Street Southeast
Minneapolis, Minnesota 55414

Theodore Audel & Co.
Div. of Howard W. Sams & Co., Inc.
Indianapolis, Indiana 46206

Tweedy Transparencies, Inc.
208 Hollywood Avenue
East Orange, New Jersey 07018

Ulano
610 Dean Street
Brooklyn, New York 11238

U. S. Forest Service
Washington, D. C. 20225

United States Steel Corp.
Pittsburgh Film Center
525 William Penn Place
Pittsbugh, Pa. 15230

United Transparencies, Inc.
P. O. Box 888
Binghamton, N. Y. 13905

Visual Products
3 M Company
2501 Hudson Road
St. Paul, Minnesota 55119

The Welch Scientific Co.
7300 N. Linder Avenue
Skokie, Illinois 60076

Wespen Audio Visual Company
Box 188
Hawthorn, Penn. 16230

West Coast Lumbermen's Assoc.
1410 S.W. Morrison Street
Portland 5, Oregon 97225

Western Publishing Co.
Western Publishing Educational Services
1220 Mound Avenue
Racine, Wisconsin 53404

Wheat Flour Institute
309 West Jackson Blvd.
Chicago, Illinois 60606

Wyckoff Steel Division
Screw and Bolt Corp. of America
P. O. Box 1256
Pittsburgh, Pa. 15230

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